

University of Colorado, Boulder
CU Scholar

Undergraduate Honors Theses

Honors Program

Spring 2014

Mental Illness, Victimization, and Parental Factors that Lead to Offending: A Study in Boulder County Jail

Olivia Kolodziejczak
University of Colorado Boulder

Follow this and additional works at: http://scholar.colorado.edu/honr_theses

Recommended Citation

Kolodziejczak, Olivia, "Mental Illness, Victimization, and Parental Factors that Lead to Offending: A Study in Boulder County Jail" (2014). *Undergraduate Honors Theses*. Paper 136.

This Thesis is brought to you for free and open access by Honors Program at CU Scholar. It has been accepted for inclusion in Undergraduate Honors Theses by an authorized administrator of CU Scholar. For more information, please contact cuscholaradmin@colorado.edu.

**Mental Illness, Victimization, and Parental Factors that Lead to Offending: A Study
in Boulder County Jail**

Olivia Kolodziejczak
Sociology Department
University of Colorado at Boulder

March 31, 2014

Honors Committee Members:
Joanne Belknap, Ph.D., Sociology Department, (Chair)
Michael Radelet, Ph.D., Sociology Department
Sona Dimidjian, Ph.D., Psychology Department

ABSTRACT

The unprecedented concentration of the mentally ill in United States' jails and prisons has gained much attention in the past few decades, however little research has examined mental illness as a risk factor for offending. The current study utilizes a survey consisting of quantitative and qualitative items to assess different variables among the inmates at Boulder County Jail (BCJ). The current study intended to address this gap in the extant literature, and assessed for demographics, mental health diagnoses and services, parental incarceration and mental illness, substance use, offending histories, and victimization histories. The findings support extant research on the concentration of the mentally ill in jails, along with their disproportionate rate of parental incarceration and mental health problems, victimization, and high number of incarcerations. The current study also puts forth tentative relationships between specific mental health diagnoses, parental factors, and types of victimization as a child and adult, and how they are subsequently related to offending. Finally, the findings from this study provide areas for future research that could help disentangle the complicated relationships between mental illness and offending.

ACKNOWLEDGMENTS

I would first and foremost like to thank my thesis chair and mentor, Dr. Joanne Belknap, for her continual work, advice, and support throughout the past year. She continually encouraged me to go above and beyond what I thought I could accomplish with both my honors thesis and undergraduate career. Dr. Belknap worked tirelessly for months to get this study approved by the Institutional Review Board (IRB) and the Boulder County Jail (BCJ), and once approved, she coached me through the data collection and analysis, along with any other assistance that I asked for. I will forever be grateful to Dr. Belknap for helping me realize my passion for research with the inmate population and for reaffirming my goal to pursue a doctoral degree in Criminology.

I would also like to thank my committee members, Dr. Radelet and Dr. Dimidjian for their support and encouragement throughout this process. I will never forget this experience, and I thank you for being a part of it.

I would also like to thank the inmates of BCJ who were kind enough to participate in my study. Many inmates at the BCJ shared some highly personal and sensitive experiences, and I am extremely grateful for their participation. I would also like to thank Sergeant Lydia Mitchell at BCJ, who has worked with us throughout the past several months. Without Sergeant Mitchell's enthusiasm regarding our collaboration and continual work, this study would have never come to fruition.

Finally, I would like to thank my friends and family for supporting me throughout this entire experience. Most of all I would like to thank my Dad, who as a single father, has provided unbelievable love and support for me throughout my entire life. To him, I attribute my work ethic, and constant drive to do better everyday. I would also like to thank my younger sister, Elena, who also provided support throughout this process, and

whose resilience and strength I admire and strive to match. I would also like to thank my friends, both at CU and back in Massachusetts, who have provided support, laughs, words of encouragement, and anything else that I have needed throughout this crazy year. I would never have done this without all of you.

TABLE OF CONTENTS

CHAPTER ONE: STATEMENT OF THE PROBLEM	7
I. Introduction: The Complicated Connection between Mental Illness and Offending	7
II. History of Mental Illness in the United States: Late 18th Century to Today	8
A. The Moral Movement: The Rise of Asylum	8
B. Deinstitutionalization: The Fall of Asylums	9
C. Transinstitutionalization: The Movement into the Criminal Justice System	10
D. Serious/Severe Mental Illness	12
III. Pathways Theory	12
IV. Should SMI Be More Directly Considered?	15
V. Conclusion	16
 CHAPTER TWO: LITERATURE REVIEW	 18
I. Parental Factor: Parent's Incarceration and Mental Health	18
II. Mental Health Services in Jails and Prisons	19
A. Correctional Staff and Qualified Mental Health Professionals	19
B. Recognition of Mental Illness: Screening and Assessment	21
C. Medication	22
D. Mental Health Services (Other than Medication)	24
III. Consequences: Mental illness in Jail and Prisons	24
A. Rule Infractions and Disciplinary Courts	25
B. Solitary Confinement	27
C. Victimization	28
D. Release, Reintegration and Recidivism: Frequent Flyers	29
IV. The Current Study	32
 CHAPTER THREE: METHODS	 34
I. Practitioner-Researcher Collaboration	34
II. Interdisciplinary Collaboration	34
III. Measurement Instrument	35
IV. The Research Cite	37
V. The Sample	37
VI. Institutional Review Board Process	38
VII. Recruitment and Data Collection	39
VIII. Data Entry and Analysis	40
IX. Conclusion	40
 CHAPTER FOUR: DATA ANALYSIS AND FINDINGS	 42
I. Univariate Findings	42
A. Demographics	42
B. Inmates' Mental Health Diagnoses and Services	43
C. Parental Factors: Mental Health and Incarceration	45
D. Brief Symptom Inventory-18	46

E. Offending History.....	47
F. Victimization History.....	48
II. Bivariate Findings.....	50
A. Brief Symptom Inventory Categories and Mental Health Diagnoses.....	50
B. Brief Symptom Inventory and Inmate Characteristics.....	50
C. Mental Health Diagnoses and Inmate Characteristics.....	53
D. Victimization Histories' and Current Offense.....	57
 CHAPTER FIVE: DISCUSSION AND CONCLUSION.....	 58
I. Discussion.....	58
II. Limitations.....	65
III. Conclusion.....	67
 REFERENCES.....	 69
 APPENDIX.....	 74
I. Appendix A: Rate of Institutionalization in the United States from 1934 to 2000.....	74
II. Appendix B: The Finalized Survey, Boulder County Jail Study: Personality, Health and Decision Making Survey.....	75
III. Appendix C: Letter of Agreement from the Boulder County Jail.....	90
IV. Appendix D: The Final Protocol Approved by the Institutional Review Board.....	91
V. Appendix E: Boulder County Jail Recruitment Flyer.....	100
VI. Appendix F: Boulder County Jail Consent Form.....	101
VII. Appendix G: Boulder County Jail Cover Letter.....	106
VIII. Appendix H: Demographics Table.....	107
IX. Appendix I: Mental Health Tables.....	108
X. Appendix J: Parental Factors Tables.....	109
XI. Appendix K: Brief Symptom Inventory-18 Table.....	110
XII. Appendix L: Offending History Table.....	111
XIII. Appendix M: Victimization History Table.....	112
XIV. Appendix N: Brief Symptom Inventory Categories and Mental Health Diagnoses.....	113
XV. Appendix O: Brief Symptom Inventory Categories and Inmate Characteristics.....	114
XVI. Appendix P: Mental Health Diagnoses and Inmate Characteristics.....	115
XVII. Appendix Q: Victimization Histories and Current Offense.....	116

CHAPTER ONE: STATEMENT OF THE PROBLEM

I. Introduction: The Complicated Connection between Mental Illness and Offending

In the United States, it is estimated that over half of the 2.3 million individuals in our jails and prisons have a mental health problem (James & Glaze, 2006), while there are only 43,000 psychiatric beds available nationwide (Torrey, Kennard, Eslinger, Lamb, & Pavle, 2010). James and Glaze (2006) found that 64.2% of jail inmates, 56.2% of state prison inmates, and 44.8% of federal prison inmates have a mental illness, while the National Institute of Mental Health (2014) reports that 26.2% of the general population has a mental illness. In a more recent study, Steadman, Osher, Robbins, Case, and Samuels (2009) found that 14.5% of men and 31.0% of women in jail have a serious/severe mental illness (SMI). The concentration of the mentally ill in our jails and prisons is due to the failure of deinstitutionalization, along with several policy shifts such as, the tough on crime movement and an overall decrease in mental health spending (Harcourt, 2011; Raphael, 2000). Correctional institutions are left ill equipped to deal with the high volume and variety of mentally ill inmates that they face. In addition, it has been found that inmates with SMI are more likely to be: referred to disciplinary courts (Fellner, 2006), charged with rule infractions (Fellner, 2006), placed in solitary confinement or a super-max unit (Rodriguez, 2012), victimized both sexually and physically (Wolff, Blitz, & Shi, 2007), and to recidivate (James & Glaze, 2006).

Despite the concentration of mentally ill individuals in jails and prisons, it is crucial to keep in mind that not all those who commit offenses are mentally ill, and not all of those who are mentally ill commit offenses and end up incarcerated. The connection between mental illness and offending is multi-layered and stems from a variety of psychological, environmental, historical, political, and economic forces. To date, there

are no conclusive studies on the psychological factors that place the mentally ill in the criminal justice system at such a high rate. Instead, this complex connection can be best understood by examining each of these larger societal forces. This paper will delve into how each of these macrosocial forces can aid in the disentanglement of this multi-layered connection between SMI and offending. Further, it will examine some of the pathways between factors such as mental health diagnoses and treatment, parental incarceration and mental health, and victimization histories that eventually lead to offending and incarceration.

II. History of Mental Illness in the United States: Late 18th Century to Today

A. The Moral Movement: The Rise of Asylums

In the late 1800s and early 1900s the moral movement began, which was the first major effort to improve the quality of life for those with mental illness. The belief behind this movement was that the manipulation of an individual's social and physical environment could fix their mental deficiencies (Morrissey & Goldman, 1986). This led to the rise of asylums, which were facilities in which an insane person could be segregated from society while receiving humane treatment. Because of these efforts, "U.S. jails went from containing large numbers of poorly treated prisoners with mental illness to the point where they constituted only 0.7 per cent of inmates" (Chaimowitz, 2011, p.1). As individuals rapidly funneled into asylums across the country, they "transformed from small, therapeutic asylums into large, custodial institutions" (Morrissey & Goldman, 1986, p. 15). This dramatic increase led to: overcrowding, the rapid deterioration of conditions and services, an overreliance on physical restraint, and a variety of unethical and even torturous treatments (Morrissey & Goldman, 1986). Shortly

after asylums' peak in 1955 of 558,000 patients nation-wide, the age of deinstitutionalization began (Torrey et al., 2010).

B. Deinstitutionalization: The Fall of Asylums

Deinstitutionalization began in the late 1950s, and continued throughout the 1960s. At this time, asylums began to shut down across the country, releasing up to 30% of their total patient population each year (Baumeister, Hawkins, Pow & Cohen, 2012). Harcourt (2011) lists three major forces that drove deinstitutionalization. First was the development of psychiatric drug therapy in the 1960s. Mental health professionals began to advocate for community care because these new medications were able to completely subdue patients, making it possible to discharge them back into the community (Harcourt, 2011). These medications also made policy makers more inclined to support community-based treatment, since the patients they would be releasing were now viewed as curable. The second factor that led to deinstitutionalization was the expansion of federal welfare programs by “creating financial incentives for states to change the locus of care of the mentally ill away from state institutions” (Harcourt, 2011, p.14). This gave states a financial motive to close asylums, since community-based care would save money. These two factors led to the third, which was the public's perception toward the mentally ill. Baumeister et al. (2012) found that at this time there was an increase in advocacy groups for the mentally ill. Once the public heard the horror stories of maltreatment in asylums and learned that these individuals could be effectively treated in the community, they began to put pressure on policy makers for asylums to shut down. All three of these factors led to asylums shutting down across the United States.

Deinstitutionalization was based on the idea that the mentally ill would get more humane and effective treatment from community-based groups and institutions.

Unfortunately, asylums began releasing patients before these community-based services were ever established. Torrey et al. (2010) found that by the 1980s, 87% of the 558,000 patients once housed in asylums were released back into the community, without new forms of mental health care to treat them.

C. Transinstitutionalization: The Movement into the Criminal Justice System

Deinstitutionalization was seen as a “liberal and enlightened movement” (Chaimowitz, 2011, p.2), but the good intentions of this movement did not materialize. In the 1970s and 1980s, there were few state-run psychiatric hospitals and the intended community-based institutions were never established (Chaimowitz, 2011). There was a growing need for an institution to house these individuals. This led to what Harcourt (2011) and others have called “transinstitutionalization” or the movement of the mentally ill into prisons and jails. The primary issue was that there were simply no other institutions in which these individuals could be placed. Raphael (2000) found that “the reduction in the service capacity of state and county mental hospitals over the past three decades is directly responsible for a large number of mentally ill individuals incarcerated” (p.11). Figure 1 (see Appendix A) shows that in 1955 mental hospitals contained 830 per 100,000 adults, and in 2000 they contained 40 per 100,000 adults. In 1955 prisons and jails contained about 200 per 100,000 adults, and in 2000 contained 840 per 100,000 adults (Harcourt, 2011, p.6). These numbers show the direct correlation between the decrease in the mental hospital population and the increase in jail and prison populations. In 1955 there was one psychiatric bed for every three hundred Americans, and today there is one psychiatric bed for every three thousand Americans (Torrey et al., 2010). Although the mass closure of in-patient psychiatric facilities was the major

proponent behind the movement into the criminal justice system, there were also several other factors that led to this movement.

The factors that led to the mentally ill moving into the criminal justice system have been speculated upon and argued over for the past few decades. As previously stated, the main reason is the failure of deinstitutionalization and the failure to establish community-based treatment, but there were a few other factors led to this movement. First was the reduction in mental health spending, which made it difficult for new psychiatric hospitals to be established (The Sentencing Project, 2000). Second, was the establishment of tougher sentencing laws, which happened to coincide with deinstitutionalization in the 1970s and 1980s. Policies such as the Three Strikes Law, the Tough On Crime Movement, and the War on Drugs massively increased incarceration rates for the mentally ill and healthy alike (Raphael, 2000). These policy shifts have led to the unprecedented era of mass incarceration that we see in our society today. In addition, public perception towards the mentally ill shifted from viewing them as victims and sick individuals, to viewing them as violent criminals (Harcourt, 2011; Baumeister et al., 2012). Therefore, these policies were advantageous to politicians because it helped gain support from the public. Third, were the barriers to psychiatric hospitals. It is difficult to get an individual committed to a psychiatric hospital, and these facilities often turn down prospective patients. To be admitted to a psychiatric hospital an individual must exhibit dangerousness, rather than a need for treatment. Many individuals with mental illness are “now left untreated until their mental illness deteriorates to the point where they commit a criminal offense and are sent to prison” (Human Rights Watch (HRW), 2003, p. 24). The HRW (2003) estimates that 20% to 33% of the homeless population has a serious mental illness. This massive failure of mental health services has

led to what many have called “the criminalizing of the mentally ill” (Fellner, 2006, p. 393). In addition, if an individual is arrested and sentenced to a psychiatric facility, once they are stabilized, they will be sent to jail or prison to serve the remainder of their sentence (HRW, 2003). The combination of the shortage in mental health funding, tougher crime policies, and barriers to psychiatric institutions has left a huge population of mentally ill individuals with no other option besides living on the streets. Today, the most common way to become committed to a psychiatric hospital is to first be arrested. However, there is a shortage of psychiatric beds and once the mentally ill individual is in the criminal justice system, often the only sentencing option is incarceration (HRW, 2003).

D. Serious/Severe Mental Illness

The term serious or severe (used interchangeably in the literature) mental illness is what will be used to describe these individuals throughout the rest of the paper. Serious mental illness (SMI) refers to disorders that include: “schizophrenia, schizoaffective disorder, all other psychotic disorders, bipolar 1 disorder, and major depressive or other bipolar/mood disorders” (Becker, Andel, Boaz, & Constantine, 2011, p.17). In other words, the term SMI encompasses almost all Axis I and Axis II disorders defined by the Diagnostic and Statistical Manual of Mental Disorders-IV-TR (DSM-IV-TR).

III. Pathways Theory

The pathways theory on crime is a fairly new perspective, and thus has a limited amount of research. In general, pathways theory asserts that there are certain events in an individuals life that are more likely to produce pathways that lead to offending, and at the same time these pathways are embedded in social institutions (Kemshall, Marsland, Boeck, & Dunkerton, 2006). The themes in pathways theory overlap with general strain,

life course, and the cycle of violence theories. Most of the research out there has looked at women, specifically women who were victimized and later went on to commit criminal offenses, or on the pathway between child maltreatment and offending. It has been established that those who are victims of violent crime, are more likely to eventually engage in such behaviors themselves (Turanovic & Pratt, 2013). However, many questions still remain as to why these victims of violent offenses go on to commit crimes. From a realist position, pathways are seen as linear and predetermined, and are primarily characterized by certain risk factors (Kemshall et al., 2006). It has been argued that pathways must be recognized as “social processes that have multiple causes, and that such causes are not merely additive, and that subtle differences in initial conditions may over time produce large differences in outcomes (Farrington, 2000, as cited in Kemshall et al., 2006).

Agnew’s (2001) general strain theory highlights many strains that lead to offending that can also be found in pathways theory. In fact, much of the literature on pathways theory builds off of Agnew’s theory. General strain theory proposes that strains are most likely to lead to crime when they are viewed as unjust, viewed as high in magnitude, associated with low social control, and when they create pressure or incentive to engage in criminal coping (Agnew, 2001). There are a plethora of strains that have been examined in regard to general strain theory that have also been examined as a pathway to offending, such as victimization and various forms of child maltreatment.

Victimization is associated with a multitude of negative outcomes, including “deleterious effects on self-efficacy, trust, and social interaction, as well as anxiety, depression, and anger” (Turavonic & Pratt, 2013, p. 323). These psychological consequences create a need for victims to find a way to cope, and these coping strategies

have an effect on life-course trajectories. These effects can be especially profound when coping strategies consist of substance use and offending, which are most commonly seen in those who have endured violent victimization. Turavonic and Pratt (2013) note that victimization has been largely ignored in the literature as a cause of crime and delinquency. They also found that low-self control is critical in understanding the behavioral consequences of victimization, since those who have low-self control may be less likely to delay gratification after being victimized, seeking coping strategies such as substance use and offending. Further, substance use has been found to produce significant conditional effects in the pathway between victimization and offending (Turavonic & Pratt, 2013). Arnold (1990) conducted a study on Black incarcerated women, and found that different dimensions of victimization such as “patriarchy, family violence, economic marginality, racism, and mis-education” create an environment that leads to criminalization (p. 153). Further, this criminalization led to “structural dislocation” from family, the education system, the occupational system, and their communities as a whole.

The vast majority of the research on pathways theory has focused on women, and what pathways lead them to towards a criminal lifestyle. Brennan, Breitenbach, Dieterich, Salisbury, and Van Voorhis (2012) note that although this theory is still fairly new, it has been established that the pathways to offending for women appear to be different from the pathways for men. In their study they synthesize the previous literature and develop five recurring typified pathways that are seen in women. First, is the normal or situational female offender who is seen as normal due to “the relative absence of risk factors, later onset, and relatively minor histories of property or drug offenses” (p. 1485). Female offenders who are placed in this pathway typically have little or no history of mental illness, abuse, or academic problems. Second is the adolescent limited pathway, in

which females commit less serious offenses during adolescence and tend to desist from criminality as they enter early adulthood. Third, is the victimized, socially withdrawn, and depressed pathway. This pathway is primarily characterized by “early abuse and trauma leading to social withdrawal, mistrust, hostility, depression, drug abuse and crime” (p. 1485). In this pathway, early life victimization is seen as a clear pathway that leads to both criminality and mental health problems. Fourth, is the chronic serious offender pathway, which is similar to the previous pathway, but both the victimization and offending are viewed as more serious. These women display a complex pattern of early physical and/or sexual abuse, child behavioral problems, school and family problems, delinquency, low self-control, an aggressive or hostile personality, and ongoing criminality” (p. 1485). The fifth and final pathway, consists of socialized offenders and socially marginalized groups. This pathway includes women who are of low SES and education level, and who are often marginalized or of a minority population. Here, it is thought that this low social status is the main factor that leads to a life of offending. The study conducted by Brennan et al. (2012) is useful in outlining the five main pathways that have been seen in the literature that depict the factors that lead to female criminality.

Kapp (2000) examined adult offenders in prisons, and compared their childhood experiences and perspectives on being placed in the juvenile justice system compared to the child welfare system. He found that the length of their stay adversely affected those who were placed in the child welfare system, and they also tended to blame the system for their life circumstances. Each failure to reconnect with family or to be placed in a home heightened their feelings of hopelessness and placement of blame on the system. In contrast, Kapp (2000) found that those who were placed in the juvenile justice system do

not blame the system for their circumstances. Suggesting that “there seems to be different impressions of the pathways from the juvenile system to the adult system depending on the original reason for entry—child maltreatment versus illegal behavior” (Kapp, 2000, p. 73). It seems that child maltreatment creates a more distinct pathway to adult criminal behavior than does juvenile offending.

IV. Should SMI Be More Directly Considered?

Pathways theory encompasses a variety of different social and environmental factors that can create pathways that lead to delinquency and criminality. However, SMI has largely been ignored in the literature as a pathway to offending. Given that SMI is seen in such high prevalence within the criminal justice system, it is a pathway to offending that must be examined. Although there has been some research on parental mental illness leading to subsequent offending, it does not connect parental mental health problems to potential mental health problems in offspring, which then may in turn lead to subsequent offending. The current study aims to address this gap in the literature. The survey from the current study includes items on parental incarceration and mental health history, along with the offender’s mental health and victimization history, with the aim to uncover some of the connections between these factors that eventually lead to offending and incarceration.

V. Conclusion

The connection between mental illness and offending is multi-layered and complex, and is nearly impossible to disentangle without a close examination of the larger societal forces that are at work and how they play a role in an individual’s pathway to crime. It is important to keep in mind that the majority of those who suffer from mental illness will never end up incarcerated, and a large portion of those in jail and prison do

not have a mental illness. For now, this relationship can be best understood by looking at the history of mental illness in the U.S., and how it has led to a concentration of the mentally ill in United States correctional institutions. Although many of the historical, economic, political, and societal forces that have played a role in this process have been discussed, there are undoubtedly many other factors that have contributed to the concentration of the mentally ill in U.S. jails and prisons. Keeping all of these societal forces in mind, pathways theory provides the best approach for a study on mental health and how it correlates with victimization and demographic variables among offenders. Through the understanding of both these larger societal forces and the current literature on pathways theory, we can attempt to disentangle the factors that lead to the disproportional incarceration of those with mental illness.

CHAPTER TWO: LITERATURE REVIEW

This chapter reviews the existing research related to mental health and incarceration. Findings from extant research are separated by categories including parental factors, mental health services in jails and prisons, and the consequences of being mentally ill in these institutions. The chapter concludes with an overview of the current study, and how it aims to build upon the extant research, and address the gaps within it.

I. Parental Factors: Parents' Incarceration and Mental Health

Parental offending is one of several risk factors for incarceration. Nijhof, De Kemp, and Reynolds (2009) found that a child with two criminal parents had the highest frequency of offending. Further, the frequency of a parent's offending had a positive relationship with the child's subsequent offending. Pollock, Scheider, Gabrielli, and Goodwin (1987) found that for females, but not males, the effects of parental deviance are largely based on identification with the same sex parent. This may suggest that the effects of parental offending are different for boys and girls. Further, it suggests that maternal incarceration may have more profound effects on children than parental incarceration. Klein, Forehand, Armistead, and Long (1997) found that mental health problems in a mother, along with several other factors, predict severe offending during early adulthood.

James and Glaze (2006) conducted a study on mental health and offending including jail inmates as well as, state and federal prison inmates (n = 25,167). The findings support previous research that parental incarceration is a predictor for offending in offspring. Interestingly, they found that inmates in all three types of correctional facilities with mental health problems were significantly more likely to have a family

member who was incarcerated, when compared to inmates with no mental health problems. This was found most significantly in jail inmates, where 52.1% of those with a mental health problem had a family member who had been incarcerated, whereas 36.2% of inmates with no mental health problem had a family member who had been incarcerated. These findings may be due to the fact that parental incarceration is also a risk factor for children developing mental health problems. James and Glaze (2006) also found that those with mental health problems in jails, state prisons, and federal prisons, were significantly more likely to have experienced the following during childhood: to have received public assistance, to have lived in a foster home or other institution, to have lived with one parent or someone other than their parent, and to have a parent who abused alcohol, drugs, or both alcohol and drugs. This further supports the link between parental incarceration, and subsequent mental illness and offending.

II. Mental Health Services in Jails and Prisons

A. Correctional Staff and Qualified Mental Health Professionals

Correctional staff and qualified mental health professionals (QMHP) recognize the importance of mental health training, however such training is sorely lacking in these institutions. In 2001, a survey by the National Institute of Corrections reported that forty states claim to give mental health training to correctional staff, but only seven stated that they provided more than four hours of training (HRW, 2003). The severity, frequency, and variety of mental health issues in conjunction with staffs' minimal training leaves them ill equipped to deal with these inmates. Correctional staffs' lack of understanding often leads to discrimination and violence against mentally ill inmates. "It is not surprising that some prison guards forced to work with such individuals in frightening

and appalling conditions quickly lose patience and take out their frustrations on the prisoners” (Elsner, 2006, p. 88).

In addition, there is a gross shortage of QMHP in jails and prisons, and effective mental health services are staff-intensive. There are no standards for how many QMHP a correctional facility must have, but the APA guidelines are 150 patients per psychiatrist (HRW, 2003). The inability to hire a sufficient number of QMHP is due to correctional institution’s insufficient mental health funding, and that funding has not increased to keep up with facilities’ ever-growing populations (HRW 2003). Jails are often the first contact an inmate has with the criminal justice system, and thus are crucial in identifying and managing an inmate with SMI. Elsner (2006) tells the story of a man in the Santa Fe Detention Center who clearly stated his intent for suicide, and his need to see a therapist and to get back on his medication that was discontinued upon arrest. The screening nurse denied both requests, and he subsequently committed suicide the next day. The Justice Department investigators found that there was not a single staff member who could diagnose a mental illness or prescribe medication in the entire facility. This is the case in many jails across the country (Elsner, 2006).

It is also extremely difficult to hire QMHP in jails and prisons due to their high caseloads, comparably low pay, and an environment that contradicts the foundations of rehabilitation. These positions are not glamorous and have been historically seen as “low status,” with yearly pay at least \$20,000 lower than it would be in community settings (HRW, 2003, p. 97). The atmosphere that these psychologists and psychiatrists are put in is punitive, chaotic and often inhumane. This atmosphere makes their work become futile and some QMHP who stay in these positions start to abandon their rehabilitative tendencies completely. Disturbing finds have shown that “some prison psychologists

simply refused to believe that inmates were sick, no matter how disturbed their behavior” (Elsner, 2006, p. 88). This tends to happen because QMHP will start to identify too closely with the punitively oriented staff that they are surrounded by. Elsner (2006) talked to a nurse in Los Angeles County who quit because he felt that his license might be revoked because of the dismal standards of care in which he worked. All of this also leads to high rate of turnover in mental health staff, which has adverse effects on the facilities’ mental health services. “New staff are not as familiar with prisoners mental health histories and behavior, and staff changes disrupts the development of the prisoner confidence and trust which is crucial to effective therapeutic relationships” (HRW, 2003, p. 97). Many mental health staff will quit and the ones who stay “seem to have forgotten why they entered this profession in the first place” (Elsner, 2006, p. 89). The shortage of qualified mental health professionals and their high rate of turnover have exacerbated the mental health crisis in correctional facilities.

B. Recognition of Mental Illness: Screening and Assessment

The accurate identification of mental illness is necessary for effective mental health treatment. Ideally, mental health screening would be universally administered within 24 hours of intake into a facility, however this is rarely the case today. Screening is not universally administered, and when administered, it is often done so by staff with minimal mental health training (HRW, 2003). If an inmate is not screened or screened ineffectively, the chances of them receiving subsequent treatment in a facility are greatly diminished. The fear of malingering or feigning mental illness runs deep in correctional facilities. Therefore many inmates who are actually suffering from a SMI will be dismissed and go untreated because staff believes they are faking their symptoms (HRW, 2003; Kupers, 2006). This is not say that there are no individuals feigning mental illness

in correctional facilities, however if there were more QHMP on staff they would be able to more accurately distinguish malingering from an actual mental disorder. Further, previous mental health diagnoses can be ignored upon initial intake or when an inmate is transferred to a new facility (HRW, 2003). In short, inmates with SMI often do not receive effective mental health screening and assessment, or their illness is dismissed as malingering, making it unlikely for them to receive treatment while in the facility. Those who do receive an effective screening and assessment are subject to the dismal services now implemented in jails and prisons, and may have their diagnosis and treatment plan thrown out when they are transferred to a new facility.

C. Medication

Ideally mental health services in jails and prisons would take into account an inmate's life history, individualized needs, and specific diagnoses. They would also be interdisciplinary, pulling from whatever field of psychology that will work best for the given inmate. This is how mental health services are typically administered in the community, but unfortunately these standards often do not carry over into correctional facilities. James and Glaze (2006) found that since admission into the correctional facility, inmates with mental illness were significantly more likely to have received mental health treatment in the form of prescription medication than any other type of mental health therapy. In jails 14.8% of inmates with a mental health problem had received medication, and 7.3% of inmates with a mental health problem had received therapy. In federal prisons these numbers are 19.5% and 15.1% respectively, and in state prisons they are 26.8% and 22.6%. In addition to the overreliance on medication, the vast majority of mentally ill inmates at these institutions were not receiving any form of mental health treatment (James & Glaze, 2006).

Correctional facilities tend to have an overreliance on psychotropic medications, too often using them as the sole form of treatment (Elsner, 2006; HRW; 2003). Even for severe mental disorder such as Schizophrenia, which rely heavily on pharmacological intervention, evidence shows psychosocial and family intervention as well as therapeutic rehabilitation in conjunction with pharmacological measures produces the best outcomes (HRW, 2003). Due to the limited resources and funds allocated to mental health services, QMHP can do little more than medication management (Elsner, 2006). An unfortunate reality is the over-medication of thousands of inmates nationwide. “For many who have the tough, day-to-day task of running these institutions, the best option is to heavily medicate them [inmates with SMI] until they are released.” This is often referred to as the “Thorazine shuffle” (Elsner, 2006, p. 88). The use of sedatives and other psychotropic drugs serve to control and pacify problem inmates and maintain a certain level of order within an institution. There is also the problem of going completely without medication. As previously mentioned, correctional institutions have poor screening and assessment tools, leaving many inmates with SMI to go undiagnosed. If a mentally ill inmate is without a mental health diagnosis it is unlikely that they will ever get prescribed medication. In sum pharmacological treatment is the most common mental health treatment used in jails and prisons, however many inmates remain over medicated or completely without medication.

The delivery of medication comes with its own host of problems. First, it is unlikely for inmates to receive the right dosage of the appropriate medication. Prescriptions are written for psychotropic drugs without “an adequate evaluation of the prisoner and the development of an individualized treatment plan” (HRW, 2003, p. 115). In addition, new and more effective medications, like atypical antipsychotics, may not

available to inmates because they are more expensive. Second, the institutions' rules for delivery are often in conflict with inmates' needs. Inmates will often have to wait in a single file line for hours at a time to receive their medication, which deters many from continuing with their medication regime (HRW, 2003). In addition, some of these lines are in the common areas of the jail or prison, deterring more prisoners from medication for fear of being stigmatized and victimized for their mental illness (HRW, 2003). Third is the issue of medication discontinuity. The sudden removal from psychotropic drugs can cause serious physiological reactions as well as psychosis and suicide (HRW, 2003; Kupers, 2006). This removal happens quite often with inmates due to the high turnover of staff and the movement of inmates from one facility to another. Other issues include: the inadequate monitoring of medication side effects, inadequate measures to ensure medication compliance, and the limited effectiveness of medication when the patient is confined to a cell (HRW, 2003; Kupers, 2006).

D. Mental Health Services (Other than Medication)

Inmates with SMI are unlikely to receive mental health services other than medication. The most common mental health diagnoses in correctional institutions are Major Depressive Disorder (MDD), Bipolar 1 disorder, Schizophrenia, and Post-Traumatic Stress Disorder (PTSD) (Allen, 2008). All of these disorders can be effectively treated with some form of psychotherapy alone or psychotherapy in conjunction with medication; there is little research that supports the use of medication by itself (Allen, 2008). There are dozens of forms of psychotherapy that have been proven to be effective in correctional institutions. Some examples are cognitive-behavioral therapy for the treatment of MDD and psychosocial and psychoeducational treatment for Schizophrenia (Allen, 2008). The therapeutic relationship is a factor that produces positive outcomes for

a patient, regardless of their diagnosis. However in jails and prisons “the clinician has little if any opportunity to develop a therapeutic relationship or even educate the patient about the illness and the need for medications” (Kupers, 2006, p. 12).

III. Consequences: Mental Illness in Jails and Prisons

Correctional facilities typically treat mentally ill inmates the same as other inmates, with no special allowances (Fellner, 2006). This has led to several consequences facing those with SMI in jails and prisons. Some of these consequences are mentally ill inmates facing disproportionately higher rates of: referral to disciplinary courts, rule violations, placement in solitary confinement, sexual and physical victimization, and recidivism. An in-depth examination of each is beyond the scope of this paper, however it is crucial to briefly discuss each in order to understand the implications of having such a high number of mentally ill inmates in correctional institutions without adequate treatment. In addition, it is important to keep in mind that this not an exhaustive list of these consequences.

A. Rule Infractions and Disciplinary Courts

Jails and prisons have rules that inmates are expected to follow, and if they break a rule then they are referred to disciplinary court. Since “coordinating the needs of the mentally ill with those rules and goals is nearly impossible” it is not surprising that the mentally ill constitute a disproportionate number of rule infractions (Fellner, 2006, p. 391). In state prisons 57% of inmates with mental illness have been charged with a rule violation, compared to 43.3% of inmates without mental illness, and in state prisons these numbers are 40% compared to 27.7%. The difference is seen most noticeably in jails, where 19% of inmates with mental have been charged with a rule infraction, whereas only 9.1% of inmates without mental illness have been charged (James & Glaze, 2006).

According to Fellner (2006) there are two main reasons why inmates with SMI disproportionately violate rules. The first is that many rule violations are a direct result of that individual's illness. Inmates who self-mutilate or rip their bed sheets into strips to hang themselves have been punished for "destruction of state property," and prisoners who scream and kick their cells while hearing voices have been punished for "creating a disturbance" (Fellner, 2006, p. 397). These examples show that inmates with SMI can be charged with a rule violation for something that is a direct result of their illness, and arguably, out of their control. The second reason that Fellner (2006) provides is that guards often have no or very limited mental health training, and consequently do not know how to deal with mentally ill inmates. "They cannot distinguish—and may not even know a distinction exists—between a frustrated or disgruntled inmate who 'acts out' and one whose 'acting out' reflects mental illness" (Fellner, 2006, p. 397). Guards have to assume that a violation is intentional or manipulative, and thus will refer those with SMI to disciplinary courts at a disproportionate rate. This is also important because it does not imply that guards are intentionally discriminating against the mentally ill, instead it is more likely a result of their lack of understanding about mental illness. Both of these factors contribute to inmates with SMI entering disciplinary court at a disproportionate rate.

In theory, disciplinary courts are supposed to determine an inmate's culpability, but in practice, disciplinary courts just determine punishment (Fellner, 2006). An inmate's culpability and mental health status are typically not considered during disciplinary hearings. Fellner (2006) notes that the insanity defense is not an option in disciplinary courts. Mental health status is typically not considered as a mitigating factor because jail and prison officials fear that it will encourage future misconduct, send a

message of leniency, or may increase incidences of malingering (Fellner, 2006; Kupers, 2006). The punishments that are usually given in disciplinary courts include the loss of privileges (e.g., visitation, shower, exercise, and work), as well as monetary restitution. The next section will discuss solitary confinement, the most severe punishment that can be given for a rule infraction. Some disciplinary courts that do evaluate mental health status in determining punishment will offer rehabilitative alternatives to punishment. “Such alternatives may include placement in specific therapy or psycho-education groups, individual counseling or therapy, or placement in an intensive behavioral therapy unit” (Fellner, 2006, p. 400). Certainly this would be the best option for an inmate with SMI, unfortunately “most prisons do not offer the possibility of tailoring sanctions to accommodate mental illness” (Fellner, 2006, p. 401).

B. Solitary Confinement

Solitary confinement is the most severe punishment that can result from disciplinary courts, and results in an inmate being segregated from the general population for any amount of time. Fellner (2006) describes solitary confinement as typically consisting of inmates being held in their cell from 23 to 24 hours a day, with 3 to 5 hours of out-of-cell recreation time every week. “Recreation time typically consists of solitary exercise in a space with no equipment” (Fellner, 20006, p .402). Inmates in solitary confinement are typically allowed little or no personal possessions, restricted or no visitation privileges, and are served food and medication through a slot in the door (Rodriquez, 2012). Solitary cells typically have cement walls, steel doors and no windows, with some having no clock and a light that is kept on 24 hours a day (Rodriquez, 2012). The length of a stay in solitary confinement ranges from days to decades. Solitary confinement cells “are now used to warehouse thousands of prisoners

with mental illness” with up to one-half, or in some cases two-thirds, of those in solitary suffering from a SMI (Rodriguez, 2012, p. 4).

The conditions of solitary confinement make effective mental health treatment nearly impossible, and however limited the mental health services are for general population inmates, it is significantly worse for those who are segregated (HRW, 2003). Many will go untreated or under-treated because the staff will dismiss their symptoms as malingering (Fellner, 2006 p. 404). If an inmate in solitary does receive treatment it will typically consist of brief cell-side sessions with a therapist, often with no confidentiality, or the passing of medication through the slot in their door (Fellner, 2006). The clinician has little or no opportunity to develop a therapeutic relationship, and psychotropic medications are minimally effective when the patient is confined to a cell (Kupers, 2006). At times inmates will display such severe symptoms that they will be removed from solitary and placed in an in-patient psychiatric facility. But once they are stabilized, they will often be returned to solitary where their mental deterioration continues (Fellner, 2006).

Not only does solitary confinement exacerbate the mental conditions of those with SMI, but it also brings out SMI in inmates with no history of mental illness. It is not surprising that “in the context of near-total isolation and idleness, psychiatric symptoms emerge, even in previously healthy prisoners” (Kupers, 2006, p. 2). Grassian (2006) found that the majority of the inmates he came in contact with in solitary confinement displayed psychiatric symptoms, although many had no prior psychiatric history. Kupers (2006) makes the claim that, given the new instance of SMI in previously healthy inmates, it is not a stretch to say that we have created the perfect recipe for madness in solitary confinement cells.

C. Victimization

Individuals with mental illness are disproportionately likely to be sexually and physically victimized in correctional institutions, as well as in the community. According to Kupers (2006,) inmates taking antipsychotics are more likely to be victimized because these medications slow their reaction times, making them more vulnerable to an attack. Kupers (2006) has rationalized a prison rapist's search for a target. He argues that they are looking for a loner, who is unlikely to have friends who might retaliate. This way, the rapist has a lower chance of facing apprehension and retaliation. Inmates with SMI fit the profile for a vulnerable and isolated victim, and thus are disproportionately selected as targets (Kupers, 2006). James and Glaze (2006) found that jail inmates with mental illness are three times as likely to be injured in a fight than those without mental illness, and prison inmates with mental illness are twice as likely to have been injured in a fight. Wolff et al. (2007) conducted a study on mentally ill inmate victimization, also accounting for the perpetrator of the victimization. They found that an inmate with SMI is significantly more likely to be victimized by another inmate, and by both an inmate and staff member together. However, there was not a significant difference regarding mental health status when staff perpetrated the victimization. This suggests that staff does not have to worry about retaliation or the vulnerability of their target, and therefore will victimize any inmate. Sexual and physical victimization exacerbates inmates' mental conditions and often causes them to isolate and recede from activities within the jail or prison such as treatment and recreation (HRW, 2003).

Those with mental illness are also more likely to be victimized in the community. James and Glaze (2006) found that inmates with a mental illness were three to four times more likely to have been physically abused in the community. This is seen most

dramatically in jail inmates, where 20.4% of inmates with a mental illness had been physically abused prior to admission into the facility, compared to only 5.7% of inmates without mental illness. In addition, they found that inmates with a mental illness were three to five times more likely to have been sexually abused prior to admission.

D. Release, Reintegration, and Recidivism: Frequent Flyers

Transition planning and pre-release services are an essential component to community reintegration and lowered recidivism. Transition planning is broadly defined as “creating a continuum of care pertaining to mental health and substance abuse services as an inmate is released into the community” (Baillargeon, Hoge, & Penn, 2010, p. 369). Baillargeon et al. (2010) found that, in the past decade, the number of correctional systems that are implementing such services for the mentally ill have increased, with 44% providing an individualized written discharge plan, and with 100% providing medication for those prescribed them (p. 369). This shows a movement in the right direction, but as previously discussed, medication alone is not enough for the comprehensive treatment of inmates with SMI. Ideally, transition planning would begin as soon as the inmate is diagnosed with a SMI, but in practice, it does not begin until the inmate’s release is approaching (Baillargeon et al., 2010). Also, pre-release mental health assessments should be administered in all facilities in order to get the most up to date picture of the inmate’s mental health status. Unfortunately, such assessments are rarely administered and if they are, they face the same issues as mental health assessments upon intake. Equally important “is successful collaboration between the various agencies and various service providers who will be involved in the release, supervision, support, and treatment of the releasee” (HRW, 2003, p. 195).

The moment of release is incredibly stressful and overwhelming for inmates and can often produce setbacks. Elsner (2006) also found that it is typical for inmates with SMI to be released with only two or three weeks of medication as the only mental health service provided upon release. A few weeks of medication is a completely inadequate provision of mental health resources for an individual with SMI, especially since their mental condition is often exacerbated during incarceration. Unless an inmate is given comprehensive and long-term mental health services upon release that have been coordinated throughout their entire length of incarceration, the chances of successful reintegration are greatly diminished

Another important aspect of community reintegration is the conditions of release. Fellner (2006) found that inmates with SMI are at a greater risk of being denied parole. This can be “because of their disciplinary records—as well as concerns about their mental illness itself” (p. 401). A study on Pennsylvania Correctional Systems found that prisoners with serious mental illness are three times as likely as other prisoners to serve their maximum sentences (Fellner, 2006, p. 401). Both the denial of parole and the serving of maximum sentences lead to inmates with SMI being automatically released. When an inmate is automatically released or their sentences “max out” they have no conditions that they must meet once back in the community and they are not assigned a parole or probation officer. This limits their chances of receiving mental health services or any other type of services once back in the community.

Today the average offender is typically set up for failure upon release (Travis, 2005). Inmates face a plethora of barriers to reintegration and correctional facilities typically do not provide adequate resources to address these barriers, making reintegration nearly impossible for many of those who are automatically released. Travis

(2005) developed the term invisible punishment, which is punishment that is inflicted upon inmates after they are released. Travis (2005) reports that these punishments are invisible because they are largely beyond the public view and typically take place outside the traditional sentencing framework. Invisible punishment includes being ineligible for public assistance, driving privileges, as well as public housing and food stamps. Some states permanently disenfranchise felons by taking away their right to vote, and many will lose their parental rights (Travis, 2005). Additionally, many homeless shelters and health care facilities will not take in a former offender. James & Glaze (2006) report inmates with mental illness are two times more likely to have been homeless in the year before their arrest. There are also many restrictions to employment after you are released from jail or prison (Travis, 2005). When you couple all of these barriers with a mental illness that has often worsened since the initial arrest, the chances of successful reintegration are low. When inmates with SMI are released without a treatment plan and access to community-based mental health services, all of the other challenges of reentry are compounded.

These compounded challenges of reintegration cause disproportionately high rates of recidivism for mentally ill offenders (Torrey et al., 2010; James & Glaze, 2006). The lack of collaboration between the justice system and mental health system has deemed many inmates with SMI “frequent flyers” (Torrey et al., 2010, p. 9). Although there is a lack of comprehensive studies tying mental illness to recidivism, it does appear that recidivism rates are substantially higher for the mentally ill. In the Los Angeles County Jail, 90% of the mentally ill inmates are repeat offenders with 31% having been incarcerated over ten times (Torrey et al., 2010). James and Glaze (2006) also found higher rates of recidivism for the mentally ill, with them being most likely to fall under

the category of 6-10 prior sentences. The rate of criminal recidivism is one of the most important indicators of the criminal justice system's overall success. These studies indicate that the mentally ill in our community cycle between being on the streets and being incarcerated. This pattern is indicative of a massive societal failure to provide assistance to disadvantaged individuals. These statistics further prove that the criminal justice system has failed many of these inmates with serious mental illness, and in many cases the process of incarceration has placed them back into society in worse conditions and with less resources than ever before.

IV. The Current Study

The current study aims to examine mental health indicators to determine their frequencies, and to whether (and if so, how) they are related to inmates' offending and victimization histories, as well as their demographic characteristics. As previously stated, mental illness has become an increasing problem in correctional institutions. Jail administrators and staff are often ill equipped to handle this high prevalence of mental illness. In addition, the inadequate mental health services in the community contribute to these inmates cycling in and out of jails, which leads to jail overcrowding and the additional consequences previously discussed. Considering the issue of mental health in jails, the current study aims to assess for any correlation between mental health, offending, parental factors, victimization and demographics that are seen in the inmates at Boulder County Jail.

CHAPTER THREE: METHODS

I. Practitioner-Research Collaboration

The University of Colorado-Boulder (CU) Sociology Department reached out to Boulder County Jail (BCJ) to conduct research on mental health and offending on inmates. Sergeant Lydia Mitchell, at BCJ, responded enthusiastically regarding the collaboration, especially given that the two institutions had not previously worked together, and she hoped this could also result in further collaboration. Williams (2004) states that practitioners and researchers “each possess specialized knowledge, experiences, and talents that, when combined, form a whole that is far greater than the sum of their individual parts” (p. 1351). It has also been found that when researchers and practitioners work together they develop the most important research questions and are more likely to find the answers that are integral to their field of study (Williams, 2004).

II. Interdisciplinary Collaboration

Boulder County Jail (BCJ) expressed interest in having two departments at CU, Sociology and Psychology, converge and conduct research on inmates. The two departments were asked to combine studies into one survey to make it easier for both the jail staff and inmates. Within the Sociology Department, Dr. Belknap and I wanted to examine mental health indicators to determine their frequencies, and whether they are related to inmates’ offending and victimization histories, as well as their demographic characteristics. The Psychology Department research collaborators, Dr. Munakata, and her students Abigail Cher and Laura Michaelson, proposed to study whether social context influenced inmates’ decisions about whether to delay gratification for future rewards. Existing research is consistent with the idea that social-emotional contexts influence delay decisions (e.g., Harris & Madden, 2003; Michaelson, de la Vega,

Chatham, & Munakata, 2013), but specific populations that are notoriously impulsive (for example, criminals) have not been broadly explored. The Sociology and Psychology Departments complied with BCJ request and combined the two studies into one survey.

III. The Measurement Instrument

The survey primarily consisted of quantitative standardized items, but also included quantitative and qualitative items developed for this study or adapted from Dr. Belknap's prior research with collaborators DeHart and Lynch (see DeHart, Lynch, Belknap, Dass-Brailsford, & Green, 2014; Lynch et al., 2014). In addition, the final page of the survey consisted of open-ended questions. The finalized survey included five sections: demographic items, decision-making and personality items, health items, brief offending and victimization history items, and concluding qualitative questions. The decision-making and personality items were from the CU Psychology Department, but were not included in my thesis analysis¹.

The demographic items consisted of questions regarding: age, sex/gender, race/ethnicity, education, children, employment, and relationship/martial status. I constructed the health items (with approval from Dr. Dimidjian and Dr. Belknap). They were self-report items regarding the participants': (1) mental health diagnoses prior to and after intake at BCJ; (2) mental health treatments received prior to and after intake at BCJ; (3) maternal and paternal mental health diagnoses; (4) maternal and paternal

¹ In this section, there was first a short biography about a fictional character that was featured in the choice questions. In the choice questions, to measure delay of gratification, participants were asked to choose between one small monetary reward immediately and a large monetary reward after a delay. All of these rewards were hypothetical, and this was made clear to the participants. Next, there were Trust/Personality Ratings, where participants rated the character from the fictional biography on traits such as, trustworthiness and likeability. Lastly, there were Trust/Personality questions, where participants were asked to self-report their tendencies to trust or distrust others.

incarceration histories; and (5) substance use. Next, inmates were asked to complete the Brief Symptom Inventory-18 (BSI-18). The BSI-18 is a clinical tool that consists of 18 questions with three symptom scales: somatization, depression, and anxiety. It is used to measure overall psychological distress and psychiatric disorders in both medical and community populations (Derogatis, 1993). The BSI-18 was included in the survey due to the fact that many individuals may not accurately understand mental health diagnoses that they receive, or the implications of these diagnoses. Further, many individuals who suffer from mental illness will go undiagnosed. Thus, the BSI-18 served to measure both psychological distress and the potential presence of psychiatric disorders (Derogatis, 1993), to account for the fact that many individuals, both inside and outside of the criminal justice system, do not understand the nature of their mental health diagnoses or may go completely undiagnosed (Human Rights Watch (HRW), 2003).

In the offending and victimization history section of the survey, the inmates were asked several questions to assess their histories. The first portion consisted of self-report items regarding inmates' offending history, including the charge that resulted in their current incarceration, juvenile arrests, and the number of incarcerations in both jail and prison. The items assessing the inmates' victimization histories included the type of and number of times they experienced several types of victimization as a child (under the age of 18), and the type of and number of times they experienced several types of victimization as an adult (over the age of 17). These types of victimizations included sexual abuse, physical abuse, neglect, domestic violence, robbery, witnessing domestic violence, and witnessing the victimization of someone else.

Finally the survey closed with open-ended (qualitative) questions asking the inmates about their perceptions of the survey and if they had anything to add that was not

covered in the survey. It also included several strength-based questions about their futures (Agllias, 2011). The goal of this section was to acquire any additional questions or feedback the inmates had regarding the study, and to end the study on a positive note given the sensitive nature of some questions (i.e., mental illness diagnoses, victimization and offending histories). For the final survey, see Appendix B.

IV. The Research Site

The BCJ (<http://www.bouldercounty.org/dept/sheriff/pages/bcjail.aspx>) opened in 1988 and was designed to hold 287 inmates, but can house as many as 536 inmates. The jail capacity has increased six times, due to the continually increasing inmate population. The beds at BCJ range from maximum-security single-cells to minimum-security dormitory housing units. BCJ houses inmates at varying levels of security, ranging from maximum to work-release. The jail has a staff of 186 members that provide services such as food and medical needs. In addition, BCJ has registered nurses that are on duty 24 hours per day, seven days per week. BCJ also offers a variety of programs to inmates, including: group and individual counseling programs (Alcoholics Anonymous, Narcotics Anonymous, and Footsteps Program for Men and Women for Co-Occurring Disorders), educational programs, health programs (AIDS Education), weekly library services, living assistance programs, active and passive recreation, religious services, yoga, and meditation (<http://www.bouldercounty.org/dept/sheriff/pages/bcjail.aspx>).

V. The Sample

The sample was limited to inmates who had already been sentenced and who were over the age of 17. The CU Institutional Review Board (IRB) set the requirement, in their initial review of our protocol, that all participants had to be fully sentenced, which significantly constricted the population of inmates at BCJ who were eligible to participate

in the study. Thus, all post-sentenced inmates in BCJ who were 18 years or older were eligible for the study. Overall, 90 inmates were provided with the opportunity to take the survey. There were 12 inmates who declined to take part in the survey (13.4%). The most common reasons for declining to participate were worries about the implications that the survey would have on their sentence (even though they were already sentenced), prior obligations (e.g., GED homework), and not feeling up to taking the survey at the present time (indicating that they would like to on a different day). In total there were 78 inmates who chose to participate in the study and sign the consent form. However, three of these participants were omitted from analysis due to their failure to complete the majority of the survey. In the end, 75 participants were included in the analysis.

All eight modules of the jail participated in study. Four minimum-security dormitories were included in the study, and these dormitories included both work-release (WR) inmates and community work (CW) inmates. Dormitory A (n = 6) and Dormitory B (n = 9) were both comprised of a mix of WR and CW females. Dormitory C included CW male inmates (n = 15), while Dormitory D consisted of WR male inmates (n = 15). In the medium security portion of the jail, there were two modules included in the study. Both the Phoenix dormitory (n = 5), and the other medium security dormitory (n = 16) consisted of male inmates. In the intake module, there were only male inmates eligible for participation (n = 5). In the maximum-security portion of the jail, there were only females eligible for participation (n = 3).

VI. Institutional Review Board (IRB) Process

Given that CU IRB's typically identify inmates as a particularly vulnerable group regarding ethical research and consensual participation, it is not surprising that IRB approval required numerous submissions and changes that took over three months.

Similarly, the legal staff for the BCJ also had legitimate concerns regarding the inmates' participation, which contributed to this lengthy and comprehensive process. While both organizations were understandably concerned about the participants' consent and participation possibly "triggering" a negative psychological response (e.g., about their victimization histories), there were also some concerns specific to each organization. For example, the BCJ was fine with interviewing pre-sentenced inmates, but the IRB would not allow inmates who had not been sentenced to participate. Furthermore, the IRB did not raise concerns about participants reporting information in regard to unsolved crimes on the surveys, but this was a primary concern among the legal staff in the BCJ. Also, the BCJ was going through significant changes and suffered the death of a long-term and well-loved deputy during this complicated IRB process, which further impacted the timeliness of obtaining feedback on the IRB required changes, the letter of approval from BCJ to the IRB (see Appendix C), and scheduling the data collection. Appendix D is the final protocol approved by the IRB.

VII. Recruitment/Data Collection

Prior to data collection, a flyer was placed around the jail by BCJ staff, briefly explaining the upcoming study (for recruitment flyer, see Appendix E). Inmates in BCJ were made aware that participation in research was voluntary, and even if they consented to participate they were free to skip survey questions or withdraw at anytime without penalty. Inmates were escorted by BCJ staff wearing plain clothes to a room where either Dr. Belknap or I distributed a cover letter with a brief description of the study, and two copies of the consent form (see Appendix F and G). Dr. Belknap and I conducted the data collection on March 5th 2014, over a seven-hour period. We were escorted separately to the various modules to describe the study, distribute and collect the consent forms, and

administer the surveys. More specifically, we orally presented an overview of the study and the consent form. It was made clear to participants that participation was completely voluntary, and they were allowed to stop at any time or to skip any questions that they did not want to answer. Before and during data collection, we answered any questions that the inmates had regarding the study and their participation. If inmates chose to participate in the study, they were asked to sign and date one copy of the consent form, and return it to the member of the CU research team. Inmates were allowed to keep both the cover letter and the remaining copy of the consent form. After completed consent forms were collected, those who chose to participate in the study were given a manila envelope containing the survey.

The survey was initially thought to take 30 to 45 minutes to complete, but most participants completed the survey in 15 to 25 minutes. Either Dr. Belknap or I was present at all times during data collection, including distribution of the consent form. Following completion of the survey, we verbally debriefed the participants. Inmates were also provided with resources for any questions or concerns, including psychological counseling. Inmates were then escorted back to their modules by the BCJ staff wearing plain clothes, after turning in their surveys. These procedures were repeated in each of the eight modules at BCJ.

VIII. Data Entry and Analysis

Following survey collection, I was responsible for entering, coding, and cleaning the data into a Statistical Package for Social Sciences (SPSS) file². Next, I worked with Dr. Belknap to conduct univariate analyses, to report the frequencies (distributions) of the

² Dr. Belknap instructed me on how to make the SPSS file for the survey, but I was primarily responsible for making the SPSS template for the BJS survey data.

demographics, mental health, BSI-18, offending, and victimization characteristics.

Following the completion of the univariate analyses, Dr. Belknap and I worked on conducting bivariate analyses to see how the different inmate characteristics (i.e., mental health, offending, and victimization) were correlated.

XI. Conclusion

This chapter discussed the study design, data collection, and proposed analyses. It also reported the challenges of working with an incarceration institution and the IRB in achieving a study that provided inmates with clarity and to minimized any sense of coercion. The following chapter reports the survey findings (except the decision making questions from the psychology contingent of the CU Research Team).

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

This chapter reports the findings on the demographic, mental health (including the Brief Symptom Inventory-18 (BSI-18)), and offending and victimization histories among 75 inmates in the Boulder County Jail (BCJ). The findings are divided into univariate and bivariate analyses, and all of the tables are in the appendices.

I. Univariate Findings

A. Demographics

Table 1 (see Appendix H) reports the demographic characteristics of the final sample (N = 75). The sample was 76% male, and 24% female. In terms of age, about 27% of the sample ranged from 18 to 24 years old, 15% ranged from 25 to 29, 28% ranged from 30 to 39, and 31% were over 40 years old. ($X = 34.6$). In terms of race/ethnicity, 58% of the sample identified as White, 22% as Latino/a, 12% as bi/multi racial, 4% as African-American, 3% as American Indian/Native American, and one participant identified as “other” (1%). In terms of education, surprisingly, about 25% of the sample had completed some college without receiving a degree, about 21% did not complete high school or receive a GED, 20% received a GED, about 15% graduated high school, 12% received a college degree, and 7% did some graduate work or even acquired a graduate degree.

In terms of employment prior to jail, 50% of the sampled inmates worked full-time, and 28% were not employed. The remaining inmates worked part-time (7%), occasionally (11%), or were on disability/SSI (4%) (see Table 1). For the last year that inmates had worked, 50% of the sample had last worked in 2012 or 2013, 32% had last worked in 2014, and 18% had not worked since before 2012. In terms of income for the

last year worked, 29% of the sample had made between \$15,000 and \$34,999, 27% had made over \$35,000, 22% had made under \$10,000, and 22% had made between \$10,000 and \$14,999 ($X = 24,590$).

In terms of relationship status prior to incarceration, 41% of the sample was single, about 30% was either married or cohabitating, about 16% was divorced, and about 14% of the sample was in a committed relationship. For total number of children, about 30% of the sample had no children, 27% had over three children, 24% had one child, and the remaining 20% of the sample had two children ($X = 1.76$). In terms of children under the age of 18, about 46% of the sample had no children under 18, 24% had one, about 14% had two, and the remaining 17% had over three children under 18 ($X = 1.14$).

B. Inmates' Mental Health Diagnoses and Services

Table 2 (see Appendix I) reports the participants' self-reported mental health diagnoses that they had received both prior to and after intake at BCJ. The different mental health diagnoses were not mutually exclusive (i.e., Anxiety Disorder, Depressive Disorder, Post-Traumatic Stress Disorder (PTSD), Schizophrenia, Bipolar Disorder). There was also a space provided for inmates to list any additional mental health diagnoses that they had received. The self-reported rate of Anxiety Disorders was about 35% prior to intake, and 16% while incarcerated at BCJ. For Depression, the self-reported rate was about 44% prior to intake, and 24% while incarcerated. For PTSD, these numbers were 28%, and 9% respectively. In regard to Schizophrenia, the self-reported rate was about 3% prior to intake, while no participants reported being diagnosed with schizophrenia at BCJ. The self-reported rate of Bipolar Disorder was about 28% prior to intake, and 11% while in jail. In addition, about 11% of inmates reported receiving another mental health diagnosis prior to intake at BCJ, and 4% of

inmates reported receiving an additional diagnosis at BCJ (See Table 2). These diagnoses included Obsessive-Compulsive Disorder, Attention Deficit Hyperactivity Disorder, and Addiction. Across all disorders, inmates reported a higher rate of diagnosis outside of jail, than inside of jail. The disproportionately high rate of serious mental illness (SMI) in jail is consistent with prior research (e.g., James & Glaze, 2006; Stedman et al., 2009; Lynch et al., 2014).

Given that inmates could endorse multiple mental health diagnoses in addition to specific diagnoses, Table 3 reports the *number* of mental health diagnoses that inmates reported. About 43% of the sample reported no diagnoses prior to intake at BCJ, 19% reported one diagnosis, 16% reported two, 7% reported three, 13% reported four, and the remaining 3% reported five diagnoses ($X = 1.37$). In regard to mental health diagnoses received at BCJ, 72% reported receiving none, about 11% reported one, 8% reported two, 4% reported three, about 5% reported four, and no inmates reported receiving five mental health diagnoses at BCJ ($X = 0.60$).

Table 4 reports the mental health services that inmates reported receiving prior to and after intake at BCJ. The listed mental health services were not mutually exclusive (i.e., group therapy, individual therapy, medication, inpatient care). There was also a space provided for inmates to list any additional mental health services that they had received. For group therapy, about 36% reported receiving this service prior to intake at BCJ, and 23% reported receiving it while at BCJ. In regard to individual therapy, about 39% reported receiving this service prior to intake, and 16% reported receiving individual therapy while at BCJ. About 39% of the sample reported receiving medication for a mental health problem prior to intake, and about 24% reported receiving medication at BCJ. About 16% of the sample reported receiving inpatient treatment prior to intake,

whereas only 4% reported receiving inpatient care while at BCJ. In addition, 4% of inmates reported receiving additional mental health services both pre- and in-jail. These additional mental health services included rehabilitation services and peer-support therapy (See Table 4).

Table 5 (see Appendix I) consists of self-reported substance use items.

Participants were asked whether they thought they had a drinking problem, whether they thought they were addicted to any drugs other than alcohol, and whether they had ever been diagnosed with Substance Use Disorder. In regard to whether inmates believed that they had a drinking problem, 56% reported that they did not, 43% reported that they did, and one inmate was not sure (1%). Turning to whether inmates believed that they were addicted to any drugs other than alcohol, 57% reported that they were not, 41% reported that they were, and one inmate was not sure (1%). In regard to whether inmates had ever been diagnosed with Substance Use Disorder, 65% reported that they had never received this diagnosis, 22% were not sure if they had, and the remaining 14% had received a diagnosis for Substance Use Disorder. The finding that over two-fifths of inmates reported they either had a drinking problem (43%) or were addicted to another drug (41%), while only 14% had been diagnosed with Substance Use Disorder suggests that this disorder is significantly under diagnosed. It may also poses the possibility that some of the other mental health disorders (e.g., Depression, PTSD) are also under diagnosed in this population.

C. Parental Factors: Mental Health and Incarceration

Participants were asked to report whether they had knowledge of either their mother or father having several mental health diagnoses (see Table 6 in Appendix J). These diagnoses (i.e., Anxiety Disorder, Depressive Disorder, PTSD, Schizophrenia,

Bipolar Disorder) were not mutually exclusive. Once again, there was a space provided for inmates to list any additional mental health diagnoses that they had knowledge of their parents receiving. For maternal diagnoses, 33% of the sample reported their mother having a Depressive Disorder, 24% reported an Anxiety Disorder, 10% reported PTSD, 10% reported Bipolar Disorder, and 3% reported Schizophrenia. It is important to note that a large portion, about one-fourth (25%), of participants were unsure whether their mother had any of these mental illnesses. For paternal diagnoses, 13% reported their father having a Depressive Disorder, 9% reported an Anxiety Disorder, 4% reported PTSD, 4% reported Bipolar Disorder, and 3% reported Schizophrenia. For paternal mental health, an even larger portion, one-third (33%), of participants were unsure whether their father had any of these mental diagnoses. This suggests that more participants may not have had a relationship with their father, which may be due to the higher rates of incarceration seen among inmates' fathers (see Table 7).

Table 7 reports whether participants' parents had ever been incarcerated. In regard to maternal incarceration, about 73% of participants reported that their mother had never been incarcerated, while 17% reported that their mother had been incarcerated, and 9% were not sure. Turning to paternal incarceration, 45% of participants reported that their father had never been incarcerated, while 40% reported that their father had been incarcerated, and 15% were not sure. These findings are indicative of parental incarceration being a significant risk factor for an individual's likelihood of being incarcerated.

D. Brief Symptom Inventory-18

Table 8 (see Appendix K) reports the frequencies at which inmates endorsed the BSI-18 at the varying levels (i.e., 0 = not at all, 1 = a little bit, 2 = moderately, 3 = quite a

bit, 4 = extremely) of each of the 18 symptoms. The BSI asks how much each given symptom has distressed or bothered you in the past seven days, including today. The BSI divides these symptoms into three clusters: somatization, depression, and anxiety. Looking at the three clusters of symptoms, the summed somatization items had the lowest mean ($X = 0.70$) of the three primary BSI categories, followed by the summed anxiety items ($X = 1.02$), and finally, the summed depression items has the highest mean ($X = 1.17$). The total BSI scores for all three categories had a mean of ($X = 0.97$). In regard to the individual symptoms, the highest mean was seen in the “feeling blue” item ($X = 1.77$), followed by the “feeling lonely” and “feeling tensed or keyed up” items, that both had a mean of ($X = 1.64$). The third highest mean was seen in the “feeling hopeless about your future” item ($X = 1.21$), followed by the “feeling so restless you couldn’t sit still” item ($X = 1.18$), and then “feeling no interest in things” item ($X = 1.17$). The only other items that had a mean of 1.00 or more were: “numbness of tingling in parts of your body” ($X = 1.05$), “nervousness or shakiness inside” ($X = 1.01$), and “feelings of worthlessness” ($X = 1.00$). Overall, it seems that inmates ranked the depression items the highest, followed by anxiety items, and finally the somatization items were ranked lowest.

E. Offending History

Table 9 (see Appendix L) reports participants’ offending histories, including their current offense, whether they had any arrest as juveniles, and the number of times they were incarcerated in both jail and prison. Inmates were asked to list their current offense (i.e., prostitution, probation/parole violation, property, person (violent), drug/alcohol), and these choices were not mutually exclusive. For example, an inmate could select that their current offense was both a probation/parole violation and a property offense. For the current offense items, 60% reported that it was a probation/parole violation, 45% reported

an alcohol/drug offense, 24% reported a person (violent) offense, 16% reported a property offense, and surprisingly, no participants reported a prostitution offense.

In regard to whether participants had any juvenile offenses, 54% reported that they had an arrest as a juvenile, and 46% reported that they had none (see Table 9). In terms of the number of times in jail and in prison, inmates were asked to write in the number of times they had been incarcerated. In this section of the survey, as well as in the victimization section, many inmates entered ranges rather than a single number. If the range was between two consecutive numbers (i.e., 1-2, 4-5), the lower number was entered as the response. If the range was between several numbers (i.e., 1-3, 5-9), the number in the middle of this range was chosen. For example, if a range of 1-3 was given, two was entered as the participant's response. For the number of incarcerations in jail, 36% of inmates reported four to nine incarcerations, about 33% reported one to three, 26% reported over ten, and only 6% reported no prior incarcerations in jail. Turning to the number of times in prison, 80% of participants reported never being in prison, while about 12% reported one time, and the remaining 8% reported being in prison twice. These findings confirm the frequent cycling in and out of correctional institutions that is seen in our society today (Torrey et al., 2010; Travis, 2005).

F. Victimization History

Table 10 (see Appendix M) reports the participants' victimization histories both as children and as adults. Childhood was defined as being under the age of 18, and adulthood was defined as being 18 or older. The types of childhood victimization included sexual abuse, physical abuse, neglect, robbery, witnessing domestic violence, and witnessing the victimization of others. The types of adult victimization included sexual abuse, physical abuse, domestic violence, robbery, and witnessing the

victimization of others. Participants were asked to enter the number of times they had experienced each type of victimization. Many participants entered high numbers (e.g., 40, 100+, 2,000), while many others entered qualitative responses (e.g., a few, too many to count, everyday for three years). Responses such as “a few” were coded as three. High numbers and answers such as “too many to count” were coded as six or more.

In regard to childhood sexual abuse, about 68% of inmates reported no instances, while about 19% reported one to five instances, and the remaining 13% of participants reported six or more instances of sexual abuse during childhood. Turning to childhood physical abuse, 56% reported no instances, 36% six or more instances, and the remaining 8% reported one to five instances of physical abuse during childhood. Items asking about childhood neglect by a parent or guardian indicated that, 63% of participants experienced no instances, while 29% experienced six or more instances, and the remaining 9% experienced one to five instances of neglect during childhood. In regard to robbery as a child, 83% of the sample reported no instances, about 13% reported one to five instances, and the remaining 4% reported six or more instances. For witnessing domestic violence as a child, about 62% reported no instances, about 27% reported six or more instances, and the remaining 11% reported one to five instances of witnessing domestic violence during childhood. In regard to witnessing the victimization of others as a child, 51% of inmates reported no instances, about 27% reported one to five instances, and the remaining 23% of the sample reported six or more instances.

In regard to sexual abuse as an adult, 87% reported no instances, 13% reported one to five instances, and no inmates reported six or more instances of sexual abuse during adulthood. Turning to physical abuse as an adult, 47% of the sample reported no instances, 32% reported one to five instances, and the remaining 21% of the sample

reported six or more instances of physical abuse during adulthood. In regard to domestic violence as an adult, 58% reported no instances, about 30% reported one to five instances, and the remaining 13% of participants reported six or more instances. Items asking about robbery as an adult indicated that about 61% experienced no instances, about 34% experienced one to five instances, and the remaining 6% experienced six or more instances of robbery during adulthood. In regard to witnessing the victimization of others as an adult, 49% of inmates reported no instances, while 27% reported one to five instances, and the remaining 24% of the sample reported six or more instances of witnessing the victimization of others as an adult. These findings are consistent with prior research that has found that inmates are subjected to disproportionate rates of victimization both in the community and while incarcerated (James & Glaze, 2006; Wolff et al., 2007).

II. Bivariate Findings

A. Brief Symptom Inventory-18 Categories and Mental Health Diagnoses

Table 11 (see Appendix N) reports the correlations between the BSI three main categories: somatization (SOM), depression (DEP), and anxiety (ANX), as well as all items/categories totaled (Total), with the inmates' self-reported mental health diagnoses. As expected, the inmates self reported pre- and in-jail diagnoses were significantly related to the corresponding BSI categories. Only Schizophrenia was non-significant, and this is likely due to the few participants that reported a Schizophrenia diagnosis. This suggests that although the mental health diagnosis items were not standardized as the BSI items were, and that there may be errors in inmates' ability to self-report mental health diagnoses (e.g., they do not understand the nature of a given diagnosis, they were

undiagnosed), there is still a significant correlation between self-reported mental health diagnoses and the symptom severity assessed in the BSI.

B. Brief Symptom Inventory-18 Categories and Inmate Characteristics

Table 12 (See Appendix O) reports the correlations between the BSI three main categories and total values, and other survey items including mental health services, parental mental health diagnoses, parental incarceration, substance use, offense histories, and victimization histories. For mental health services, group therapy was only significant ($r = 0.23, p \leq .05$) for the BSI depression scale while in jail, and individual therapy was only significant ($r = 0.26, p \leq .05$) with the anxiety scale prior to intake at jail. Medication was significant prior to intake on the depression scale ($r = 0.27, p \leq .05$) and on the anxiety scale ($r = 0.25, p \leq .05$), whereas it was significant across all scales while in jail, most notably on the BSI total scale ($r = 0.36, p \leq .01$). Similarly, inpatient care was significant prior to intake on the depression scale ($r = 0.27, p \leq .05$) and on the anxiety scale ($r = 0.24, p \leq .05$), whereas it was significant across all scales while in jail, most notably on the depression scale ($r = 0.44, p \leq .01$). Overall, it seems that BSI scores are most significantly correlated with receiving medication and inpatient care while incarcerated.

In general, the BSI scales were highly correlated with parental mental illness. An Anxiety diagnosis in either parent was highly correlated ($p \leq .01$) with all four BSI scales. An Anxiety diagnosis in mothers was most significant for the BSI total scale ($r = 0.40, p \leq .01$), and for fathers it was most significant for the depression scale ($r = 0.46, p \leq .01$). A parental diagnosis of Depression was significant for all scales (with the exception of a maternal diagnosis on the anxiety scale). In regard to PTSD, both a maternal and paternal diagnosis was significant for all scales besides the somatization

scale. For Schizophrenia, a maternal diagnosis was only significant on the somatization scale ($r = 0.24, p \leq .05$), whereas a paternal diagnosis was never significant. Interestingly, a maternal diagnosis of Bipolar Disorder was never significant, while a paternal diagnosis of Bipolar Disorder was significant across all scales, most highly in regard to the somatization scale ($r = 0.45, p \leq .01$). These findings indicate that a parental mental health diagnosis is a risk factor for developing mental health problems. Surprisingly the BSI scales were not significantly correlated with parental incarceration.

Next, the BSI scales were correlated with inmates' self-reported substance use. Having a drinking/alcohol problem was significant for the depression scale ($r = 0.38, p \leq .01$), the total scale ($r = 0.30, p \leq .05$), and for the anxiety scale ($r = 0.27, p \leq .05$), but not for the somatization scale. Inmates self-reported drug addiction was significant across all BSI scales, most highly for the total scale ($r = 0.41, p \leq .01$). A diagnosis of Substance Use Disorder was also significant across all BSI scales, and the highest correlation was seen on the depression scale ($r = 0.32, p \leq .01$). Overall, these findings suggest that having an issue with substance use is highly correlated with the mental health symptoms assessed with the BSI.

In Table 12 the BSI scales were correlated with inmates' current offenses and their number of incarcerations. In regard to their current offense, probation/parole violations, person (violent) offenses, and drug/alcohol offenses were never significant. Surprisingly, property offenses were significant across all scales, with the lowest being the somatization scale ($r = 0.31, p \leq .05$), and the highest being the total scale ($r = 0.43, p \leq .01$). This suggests that those who score highest on the BSI are committing more property offenses, which may be due to the disproportionate rate of homelessness among the mentally ill (Human Rights Watch (HRW), 2003; James & Glaze, 2006). The number

of incarcerations in jail was found to be highly significant ($p \leq .01$) across all BSI scales. However, the number of incarcerations in prison was never found to be significant. This is consistent with the research that posits that the mentally ill are “frequent flyers” in the criminal justice system, cycling in and out of jail (Torrey et al., 2010).

Bivariate correlations were then conducted between the BSI scales and victimization histories (see Table 12). Sexual abuse and physical abuse during childhood was most highly correlated to the BSI, and were found to be significant across all scales. These correlations were highest on the depression scale, which was ($r = 0.38, p \leq .01$) for sexual abuse, and ($r = 0.39, p \leq .01$) for physical abuse. Surprisingly, neglect during childhood was never significant. The remaining types of victimization were only significant on one or two scales, with robbery significant on the depression scale ($r = 0.28, p \leq .05$), witnessing domestic violence on the depression ($r = 0.24, p \leq .05$) and anxiety scales ($r = 0.33, p \leq .01$), and witnessing the victimization of others on the anxiety ($r = 0.28, p \leq .05$) and total scales ($r = 0.25, p \leq .05$). For adult victimization, once again physical abuse was highly correlated across all BSI scales. However, sexual abuse was only significant on the depression scale ($r = 0.30, p \leq .05$). Witnessing the victimization of others was significant on the somatization, depression, and total scales. Lastly, robbery and domestic violence during adulthood were never significant. This supports prior research that those with mental illness are more likely to experience victimization (e.g., Wolff et al., 2007; James & Glaze, 2006).

C. Correlations between Mental Health Diagnoses and Inmate Characteristics

Bivariate correlations were conducted on self-reported mental health diagnoses with all of the same inmate characteristics as were seen with the BSI scales. Analysis was run on all five mental health disorders that were assessed (i.e., Anxiety Disorder,

Depression, PTSD, Schizophrenia, Bipolar). However, the diagnosis of Schizophrenia was only found to be significant twice (paternal Anxiety Disorder diagnosis and adult sexual abuse), possibly due to the few inmates who reported a Schizophrenia diagnosis.

First, mental health services received before and in jail were examined (see Table 13). Group therapy prior to jail was found to be significant for Depression ($r = 0.41, p \leq .01$), Bipolar Disorder ($r = 0.28, p \leq .05$), and PTSD ($r = 0.25, p \leq .05$). Both individual therapy and medication prior to jail were significant for all diagnoses other than Schizophrenia. Both were most highly correlated with depression with the same significance level of ($r = 0.57, p \leq .01$). Inpatient care prior to jail was found to be significant for both Bipolar Disorder ($r = 0.46, p \leq .01$) and Depression ($r = 0.39, p \leq .01$).

Turning to mental health services received in jail, both group therapy ($r = 0.26, p \leq .05$), and individual therapy ($r = 0.39, p \leq .01$) were found to be significant for only a diagnosis of Depression. On the other hand, medication was found to be significant for a diagnosis of Depression ($r = 0.41, p \leq .01$), Anxiety ($r = 0.36, p \leq .01$), and Bipolar Disorder ($r = 0.35, p \leq .01$). Finally, inpatient care while in jail was only significant for an Anxiety Disorder diagnosis ($r = 0.27, p \leq .05$). Overall, these results suggest that in the community those with mental illness are likely to receive a variety of different treatments, but in jail they are most likely to receive medication as treatment for mental illness. This finding is consistent with extant research (e.g., James & Glaze, 2006; Elsner, 2006; HRW, 2003). However, the findings that while in jail a diagnosis of Depression is significantly correlated with both group and individual therapy, and a diagnosis of an Anxiety Disorder is correlated with inpatient care, suggests that the services in BCJ are

providing mental health treatment in forms other than medication for some mentally ill inmates.

Next, inmates' mental health diagnoses were correlated with self-reported parental mental health diagnoses (see Table 13). For Anxiety Disorders, a maternal diagnosis was correlated with an Anxiety Disorder ($r = 0.29, p \leq .05$) and Bipolar Disorder diagnoses ($r = 0.28, p \leq .05$) in participants, and a paternal diagnosis was correlated with an Anxiety ($r = 0.24, p \leq .05$) and Schizophrenia diagnoses ($r = 0.23, p \leq .05$) in participants. A Depression diagnosis in both mothers and fathers was correlated with an Anxiety and Depression diagnosis in inmates. Interestingly, the significance level was higher for a paternal diagnosis of Depression for both Anxiety ($r = 0.36, p \leq .01$) and Depression ($r = 0.34, p \leq .01$) diagnoses among inmates. Turning to PTSD, a maternal diagnosis was correlated with both Depression ($r = 0.28, p \leq .05$) and Bipolar Disorder ($r = 0.27, p \leq .05$) among inmates, whereas paternal PTSD was never significant. For Schizophrenia, the only significance was found in maternal Schizophrenia in relation to a PTSD diagnosis in inmates ($r = 0.26, p \leq .05$). In regard to Bipolar Disorder, a maternal diagnosis was significant for a subsequent Bipolar Diagnosis among inmates ($r = 0.31, p \leq .01$), while a paternal diagnosis was significant for both Bipolar ($r = 0.36, p \leq .01$) and Anxiety diagnoses ($r = 0.27, p \leq .05$). These findings suggest that parental mental health must be more directly considered as a risk factor for offending. Surprisingly, parental incarceration was once again never significant for mental health diagnosis in offspring.

Next, self-reported mental health diagnoses were correlated with the substance use variables. Interestingly, there were less significant correlations in this comparison, in relation to the correlations between the BSI scales and substance use. A self-reported alcohol problem was only significant for a Depression Diagnosis ($r = 0.26, p \leq .05$). On

the other hand a drug addiction was significant for Bipolar ($r = 0.38, p \leq .01$), Anxiety ($r = 0.33, p \leq .01$), and Depression ($r = 0.24, p \leq .05$) among inmates. Surprisingly, a diagnosis of Substance Use Disorder was not correlated with any of the other listed mental health disorders.

Inmates' mental health diagnoses were then correlated with their current offense and number of incarcerations. In regard to inmates' current offense, surprisingly, probation/parole, person (violent), and drug/alcohol offenses were never significant. There were also no significant findings for Anxiety, Depression, PTSD, and Schizophrenia. Therefore, the only significant finding in regard to mental health diagnoses and the current offense was between property offenses and Bipolar Disorder ($r = 0.26, p \leq .05$). The number of times in jail was significant for Anxiety ($r = 0.29, p \leq .05$) and Depression ($r = 0.26, p \leq .05$), whereas the number of times in prison was never significant.

Bivariate analyses were then run with inmates' childhood victimization histories. Childhood sexual abuse was significant for Depression ($r = 0.38, p \leq .01$), Anxiety ($r = 0.34, p \leq .01$), and PTSD ($r = 0.27, p \leq .05$) diagnoses in inmates. Childhood physical abuse was significant for PTSD ($r = 0.37, p \leq .01$), Bipolar ($r = 0.35, p \leq .01$), and Anxiety ($r = 0.28, p \leq .05$) diagnoses among inmates. Despite the fact that neglect during childhood was never found to be significant when compared to the BSI categories, it was found to be significant for all mental health diagnoses besides Schizophrenia, most notably in regard to a diagnosis of Bipolar Disorder ($r = 0.34, p \leq .01$). Witnessing domestic violence during childhood was only significantly correlated with a diagnosis of PTSD among inmates ($r = 0.25, p \leq .05$). Both robbery and witnessing the victimization of others during childhood was never significant. Turning to victimization as an adult,

sexual abuse was correlated with both Schizophrenia ($r = 0.40, p \leq .01$) and Bipolar Disorder ($r = 0.26, p \leq .05$). Physical abuse was only significant for Depression ($r = 0.24, p \leq .05$), and robbery was only significant for Bipolar Disorder ($r = 0.25, p \leq .05$). Being victimized by domestic violence as an adult was correlated with a diagnosis of both PTSD ($r = 0.28, p \leq .05$) and Depression ($r = 0.25, p \leq .05$). Finally, witnessing the victimization of others as an adult was correlated with a diagnosis of Depression ($r = 0.26, p \leq .05$) and Anxiety ($r = 0.25, p \leq .05$). These findings indicate that victimization is correlated with mental illness, and that these experiences both during childhood and adulthood can also lead to subsequent offending.

D. Victimization Histories and Current Offense

This section reports the bivariate correlations between inmates' victimization history and current offense (see Table 14 in Appendix Q). Surprisingly the findings correlating the participants' offense type and victimization were never significant for any of the childhood victimization variables. The correlations between the inmates' offense type and their adult victimizations were never significant for probation/parole, person (violent), and drug/alcohol offenses, nor were they significant for sexual abuse, physical abuse, or robbery victimization. However, adults victimized by domestic violence ($r = 0.32, p \leq .01$) and those who witnessed others' victimizations ($r = 0.35, p \leq .01$) were more likely to have property offenses. The fact that the type of victimization experienced rarely had an impact on the type of subsequent offending is a finding that requires further exploration.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

I. Discussion

My thesis aimed to review the current literature regarding the relationship between serious mental illness (SMI) and offending, and how factors such as parental mental health and incarceration, as well as victimization can play a critical role in this complicated relationship. Chapter One introduced the paramount issue of those with mental illness being concentrated in U.S. jails and prisons, and to historically examine the societal forces that have led to what we see in correctional facilities today, where over half of the 2.3 million individuals in our jail and prisons have a mental illness (James & Glaze, 2006). Further, this chapter delineated why Pathways Theory best illustrates the convoluted connection between mental illness, familial factors, and victimization, and how all of these factors individually and cumulatively can construct increased risk for a pathway to subsequent offending. However, the extant literature on Pathways Theory has its limitations given that it has primarily focused on women and girls. Not only does this largely overlook the male population, whom make up the vast majority of offenders in the United States, but it also has not yet directly considered mental illness, both in the offender and in their parents/guardians, as a pathway to criminality.

Chapter Two further examined the extant literature in regard to parental factors such as mental illness and incarceration, and how these traits can pose a risk for an intergenerational transmission of offending (e.g., Klein et al., 1997; Nijhof et al., 2009; Pollock et al., 1987). It next examined the issues with the mental health services that are currently provided in jails and prisons such as poor screening and assessment (Human Rights Watch (HRW), 2003), a lack of qualified mental health professionals (Elsner, 2006; HRW, 2003), and an overreliance on medication as the sole form of treatment

(Elsner, 2006; James & Glaze, 2006). The chapter then delved into the consequences of having such a high concentration of mentally ill individuals behind bars. These consequences include mentally ill inmates being disproportionately: referred to disciplinary courts (Fellner, 2006), charged with rule infractions (Fellner, 2006), placed in solitary confinement or a super-max unit (Rodriguez, 2012), victimized both sexually and physically (Wolff et al., 2007), and to recidivate, ending up incarcerated once again (James & Glaze, 2006). Chapter Two concluded by outlining the intentions for the current study described and reported in this thesis, in the Boulder County Jail (BCJ). First, the current study aimed to examine mental health diagnoses and their frequencies, and to determine whether (and if so, how) they are related to inmates' offending and victimization histories, and parental characteristics, as well as their own demographic characteristics. Second, the study intended to address the gap in the literature regarding mental illness as a pathway to offending. Finally, the intended result of the current study was to produce findings that could help better equip jail administrators to understand and treat the burdening load of mentally ill inmates that they house.

Chapter Three outlined the methods used in the current study in BCJ. It first expressed how integral both practitioner-researcher collaboration and interdisciplinary collaborations were in the formation and implementation of the study. The finalized measurement instrument was a survey consisting of both quantitative and qualitative items that assessed personality traits, mental health, and decision-making among the inmates in the BCJ. The final sample consisted of 75 inmates from the eight modules at the BCJ. This chapter then describes the lengthy and comprehensive process to gain approval from the Institutional Review Board (IRB) and BCJ, as well as the recruitment and data collection procedures, and finally, the data entry and analysis methods.

Chapter Four reported the univariate frequencies of the variables assessed in the current study, along with the bivariate correlations conducted between these different variables. The majority of univariate findings are consistent with existing inmate research. In regard to mental health diagnoses (see Table 2), the participants reported a higher rate of mental health diagnoses across all disorders than is seen in the general population (National Institute of Mental Health [NIMH], 2014). This is consistent with the findings that inmates have a significantly higher rate of mental illness than the general population (e.g., James & Glaze, 2006; Lynch et al., 2014; Steadman et al., 2009). As expected, across all measured disorders inmates reported a higher rate of diagnosis prior to intake at BCJ, than they did while incarcerated at BCJ. This is indicative of the inadequate screening and assessment typically used in correctional institutions (HRW, 2003). However, it is important to note that a large proportion of inmates did report receiving mental health diagnoses at BCJ, which suggests that the mental health services at BCJ are more effective and comprehensive than they are in many jails and prisons in the United States today. In addition, a large proportion of inmates reported receiving more than one mental health diagnoses prior to intake (38.7%) and while at BCJ (17.3%), which indicates that comorbidity is a primary problem among the inmate population (see Table 3). The high rate of comorbid mental disorders is a primary issue of concern that requires increased awareness during the assessment, diagnosis, and treatment of inmates, as well as moderating their interactions with other inmates and jail staff.

In regard to substance use, although over two-fifths of inmates reported either a drinking problem (42.7%) or drug addiction (41.3%), only 13.5% of inmates reported being diagnosed with Substance Use Disorder (see Table 5). These findings indicate that Substance Use Disorder is underdiagnosed in the inmate population, which poses the

possibility that the other mental disorders (e.g., Depression, Bipolar Disorder) may also be underdiagnosed. Therefore, the inadequate diagnosis of Substance Use Disorder is another area that requires special attention for mental health professional working with inmate populations.

Turning to the univariate findings for mental health services, across all types of services inmates had higher rates of treatment prior to intake at BCJ than while incarcerated at BCJ (see Table 4). Once again, the rates of receiving mental health services while incarcerated are uncharacteristically high, which further suggests that BCJ has mental health staff and services that are not representative of most jails in the United States. In fact, many inmates expressed that the services at BCJ are better than any other correctional facility in which they have been incarcerated, and some even expressed gratitude toward the staff at BCJ. These comments were offered both verbally during data collection and in the written open-response qualitative questions at the end of the survey. Despite the uncharacteristically high rate of mental health services at BCJ, medication (24%) was still the highest self-reported form of mental health service received, which is consistent with the extant research (e.g., Elsner, 2006; James & Glaze, 2006). Notably, group therapy (22.7%) was a close second (to the reception of medication) regarding inmates' reports of mental health services. Although these findings are both surprising and encouraging, this still leaves a large number of inmates with self-reported mental health problems who are not receiving treatment. This was confirmed in the open-ended response questions at the end of the survey, in which several participants expressed frustration with not being able to see a psychologist, or even anger for feeling that their mental health needs had been neglected.

The findings for the frequencies of mental disorders in parents also indicate a disproportionately high rate of mental health problems when compared to the general population (NIMH, 2014) (see Table 6). In addition, a large proportion of inmates reported that they were unsure of whether their parents had a mental disorder. This may simply be due to a lack of knowledge about their parents' mental health, or that they did not have a close (or any) relationship with their mother or father. This could, in turn, be due to the disproportionately high rate of parental incarceration seen among the participants (see Table 7). These findings indicate, that consistent with prior research, both parental mental illness and parental incarceration are risk factors for incarceration. In regard to pathways theory, this further suggests the need to explore parental mental illness as a risk factor for offending.

For self-reported offending histories, participants reported probation/parole violations (59.7%) as the most common offense for their current incarceration, and nearly half of the sample (45.9%) reported being arrested as a juvenile (see Table 9). In addition, the vast majority of inmates reported a high number of incarcerations in jail. This is supportive of research that has found that for many offenders there is a pattern of frequent cycling between the streets and incarceration, also known as a "revolving door" (e.g., Travis, 2005; James & Glaze, 2006).

Finally the univariate findings on these inmates' victimization histories represented an exceedingly high level of victimization, both as children and adults (see Table 10). For example, 36.1% of participants reported six or more instance of physical abuse as a child, and 33.8% of participants reported one to five instances of robbery as an adult. While these experiences of victimization undoubtedly have severe psychological consequences, these findings further support the research that victimization is a risk

factor for offending (e.g., Brennan et al., 2012; Dehart et al., 2014; Lynch et al., 2014; Turavonic & Pratt, 2013).

In the next section of Chapter Four, bivariate correlations were conducted between different variables assessed among participants. First, correlations were run between the Brief Symptom Inventory's (BSI) three primary symptom scales (somatization, depression, and anxiety) along with the BSI total scales, and inmates' self-reported mental health diagnoses (see Table 11). As expected, the inmates' self-reported pre- and in-jail diagnoses were significantly related to their corresponding BSI categories. The only exception was seen with a diagnosis of Schizophrenia, which was likely due to the few participants who reported a diagnosis of Schizophrenia, resulting in too small of an N to establish significance. The high level of significance among the remaining diagnoses suggests that inmates, for the most part, were able to accurately report the mental health diagnoses that they received. Additionally, these diagnoses were consistent with the BSI, which assessed for symptoms that are commonly seen in these diagnoses (i.e., Anxiety, Depression, PTSD, and Bipolar Disorders).

Correlations were then conducted between the BSI scales and several types of inmate characteristics (see Table 12). In regard to mental health services, surprisingly, the most significant correlations were seen with medication and inpatient care while incarcerated at BCJ. Overall, parental mental disorders were highly correlated with the BSI scales. This suggests that having a parent who suffers from a mental illness is a risk factor for developing a mental illness. These intergenerational transmission rates were highest for maternal Anxiety and Depression, and paternal Anxiety, Depression, and Bipolar Disorder. Conversely, parental incarceration was never correlated with the BSI scales, which is finding that requires further investigation. Turning to substance use,

these variables were all highly correlated with the BSI scales (with the exception of an alcohol problem on the somatization scale). This further indicates the issue of comorbidity of substance use problems and mental illness among the inmate population. Interestingly, the only current offense that was found to be significantly when correlated with the BSI scales was a property offense. Tentatively, this might suggest that the mentally ill are disproportionately likely to be homeless (James & Glaze, 2006), and thus may commit property offenses for a living or even survival. This hypothesis requires further investigation, and unfortunately the current study failed to assess for homelessness prior to incarceration.

In terms of the number of incarcerations that participants reported, jail incarcerations were significant across all BSI scales. (Prison incarcerations were never significantly related to the BSI scale, but this may be due to the far smaller N's of the sample who had been to prison). Stated alternatively, the mentally ill are "frequent flyers" (Torrey et al., 2010) in the criminal justice system, cycling back and forth between being on the streets and being incarcerated (e.g., HRW, 2003; Torrey et al., 2010). Finally, victimization was examined, and surprisingly, only certain types of victimization were significantly correlated with the BSI scales. All types of childhood victimization were correlated with the BSI scales, with the exception of childhood neglect. The types of victimization as an adult that were found to be significant were sexual and physical abuse, and witnessing the victimization of someone else. This indicates that experiencing victimization has profound psychological consequences, and is a risk factor for developing or triggering a mental illness. The mechanisms that produce differential mental health outcomes, depending on the type of abuse experienced,

are findings that require further investigation. Overall, the BSI scales were found to be significant for a large number of the variables assessed among the inmates of the BCJ.

Similarly, bivariate analyses were conducted between participants' self-reported mental health diagnoses and inmate characteristics (see Table 13). The majority of the findings reported in this table reflect the correlations with the BSI scales, and discussing each in depth would be predominantly repetitive. Overall, there were more significant correlations with the BSI scales than there were with the self-reported mental health diagnoses, which is likely due to the previously discussed limitations of inmates being able to accurately self-report mental health diagnoses. Nonetheless, there were still a large number of significant correlations reported in Table 13.

In general, the correlational findings from Table 12 and 13 further support the paramount issue of having such a high concentration of mentally ill inmates in correctional facilities. Further, these findings tentatively point to some risk factors such as parental mental illness and victimization that create a pathway to offending for the mentally ill. For the offenders at BCJ, these findings indicate that mental illness is correlated with parental mental illness, substance use, property offenses, high numbers of incarceration in jail, and several types of victimization during childhood and adulthood. It is important to keep in mind that these correlations are not temporally collected, and it cannot be determined which came first, only that they are correlated. More specifically, the findings report a relationship but not which variable occurred first. Nonetheless, these findings provide substantial support for mental illness to be more directly considered as a pathway to criminality, and for these factors (e.g., maternal depression, childhood physical abuse) to be more directly considered as pathways to mental illness, which may then, in turn lead to offending.

II. Limitations

Despite the current study's findings that serve to support the current research and to address some of the gaps in the literature regarding mental illness, victimization, and other factors that lead to offending, the current study had several limitations. First, a larger sample size would be preferable for establishing significant relationships between the included variables. Moreover, the IRB required that only sentenced inmates be including in the study, which significantly impacted our ability to obtain a larger sample. Second, considering the literature on the mental health services typically administered in correctional facilities, it seems that BCJ is not representative of a "typical jail" in the United States. Not only do the findings suggest an uncharacteristically high rate of mental health services received, but BCJ also offers a multitude of programs such as substance use, religious and educational programs. To further distinguish the services offered at BCJ, they have a general library as well as a law library, and they offer yoga and meditation classes (<http://www.bouldercounty.org/dept/sheriff/pages/jailprograms.aspx>). In addition, many inmates either wrote on the survey or verbally expressed their approval and gratitude for the services and staff at BCJ.

A third limitation is that there are issues regarding the validity of inmates' ability to self-report their own, as well as their parents' mental health diagnoses. Fourth, the current study failed to assess for homelessness, which is a prevalent issues among offenders, especially those who suffer form mental illness (James and Glaze, 2006). Finally, the bivariate data do not allow for temporal ordering, so it is difficult to report in most significant relationships what came first (with the exception, perhaps, of some of the childhood variables). Despite these limitations, the current study still offers substantial support for extant research, along with tentative hypotheses regarding the

relationship between certain mental health, parental, and victimization variables, in regard to their relationship with offending. Further, Dr. Belknap and I, plan to conduct at least one more wave of data collection in the BCJ during the summer of 2014, which has been approved by both the IRB and BCJ. This will be done in order to increase the sample N, as well as addressing some these limitations, and a wider range of the survey variables.

III. Conclusion

The concentration of the mentally ill in the United States criminal justice system should be an issue of primary concern in our society. This phenomenon is largely due to the failure of deinstitutionalization and the continued inadequacy of community-based mental health services (Harcourt, 2011). In terms of policy, there is a massive need for an improvement in community-based mental health care, which could potentially lessen the number of mentally ill individuals who come in contact with the criminal justice system. Correctional facilities are predominantly ill equipped to provide adequate mental health care to the overabundance of mentally ill inmates they face, leading to a plethora of negative consequences (HRW, 2003). Although Pathways Theory has looked at victimization and some parental characteristics as risk factors for incarceration, the role of mental illness has largely been overlooked.

The current study intended to address this gap, and succeeded in providing tentative relationships between mental illness and some of these other factors that can lead to offending. It is of paramount importance for the relationship between mental illness and offending to be better understood due to the shockingly high proportion of mental illness found in jails and prisons across the United States. The findings in the current study are supportive of prior research, and illuminate areas that require further

investigation. Primarily, how factors such as parental mental illness and incarceration, substance use, and victimization experiences can lead to mental illness, and additionally how different types of mental illness, along with homelessness and demographic characteristics, can lead to offending. Further investigation into these areas has the potential to disentangle the complicated relationship between mental illness and offending, and even to begin to remedy the crisis of mental illness within United States jails and prisons.

REFERENCES

- Agllias, K. (2011). Utilizing Participants' Strengths to Reduce Risk of Harm in a Study of Family Estrangement. *Qualitative Health Research*, 21(8), 1136-1146.
- Agnew, R. (2001). Building on the Foundation of General Strain Theory: Specifying the Types of Strain Most Likely to Lead to Crime and Delinquency. *Journal of Research in Crime and Delinquency*, 38(4), 319-361.
- Allen, S. (2008). Mental Health Treatment and the Criminal Justice System. *Journal of Health & Biomedical Law*, 4(1), 153-191.
- Arnold, R. A. (1990). Processes of Victimization and Criminalization of Black Women, *Social Justice*, 17(3), 153-166.
- Baillargeon, J., Hoge, S. K., & Penn, J. V. (2010) Addressing the Challenge of Community Reentry Among Released Inmates with Serious Mental Illness. *Community Psychology*, 46, 361-375.
- Baumeister, A. A., Hawkins, M. F., Pow, J. L., & Cohen, A. S. (2012). Prevalence and Incidence of Severe Mental Illness in the United States: A Historical Overview. *Harvard Review Psychiatry*, 20(5), 247-257.
- Becker, M. A., Andel, A., Boaz, T., & Constantine, R. (2011). Gender Differences and Risk of Arrest Among Offenders with Serious Mental Illness. *The Journal of Behavioral Health Services and Research*, 38(1), 16-27.
- Boulder County Jail. Retrieved from <http://www.bouldercounty.org/dept/sheriff/pages/bcjail.aspx>
- Brennan, T., Breitenbach, M., Dieterich, W., Salisbury, E. J., & Van Voorhis, P. (2012). Women's Pathways to Serious and Habitual Crime: A Person-Center Analysis

- Incorporating Gender Responsive Factors. *Criminal Justice and Behavior*, 39(11), 1481, 1508.
- Chaimowitz, G. (2011). The Criminalization of People With Mental Illness. *The Canadian Journal of Psychiatry*, 57(2), 1-6.
- Dehart, D., Lynch, S., Belknap, J., Dass-Brailsford, P., & Green, B. (2014). Life History of Models of Female Offending: The Roles of Serious Mental Illness and Trauma in Women's Pathways to Jail. *Psychology of Women Quarterly*, 38(1), 138-151.
- Derogatis, L. R. (1993). Brief Symptom Inventory-18. *Pearson*, Retrieved from: https://pearsonassess.ca/haiweb/cultures/en-ca/Products/Product+Detail.htm?CS_ProductID=BSI-18&CS_Category=psychological-biopsychosocial&CS_Catalog=TPC-CACatalog
- Elsner, A. (2006). The Sanity of the System. *Gates of Injustice: The Crisis in America's Prisons* (pp. 81-102). Prentice Hall.
- Farrington, D. P. (2000). Explaining and Preventing Crime: The Globalization of Knowledge—The American Society of Criminology 1999 Presidential Address. *Criminology*, 38(1), 1-24.
- Fellner, J. (2006). A Corrections Quandary: Mental Illness and Prison Rules. *Harvard Civil Rights-Civil Liberties Law Review*, 41, 391-412.
- Grassian, S. (2006). Psychiatric Effects of Solitary Confinement. *Journal of Law and Policy*, 22, 325-383.
- Harcourt, B. E. (2011). Reducing Mass Incarceration: Lessons from the Deinstitutionalization of Mental Hospitals in the 1960s. *The Law School: The University of Chicago*, 1-36.

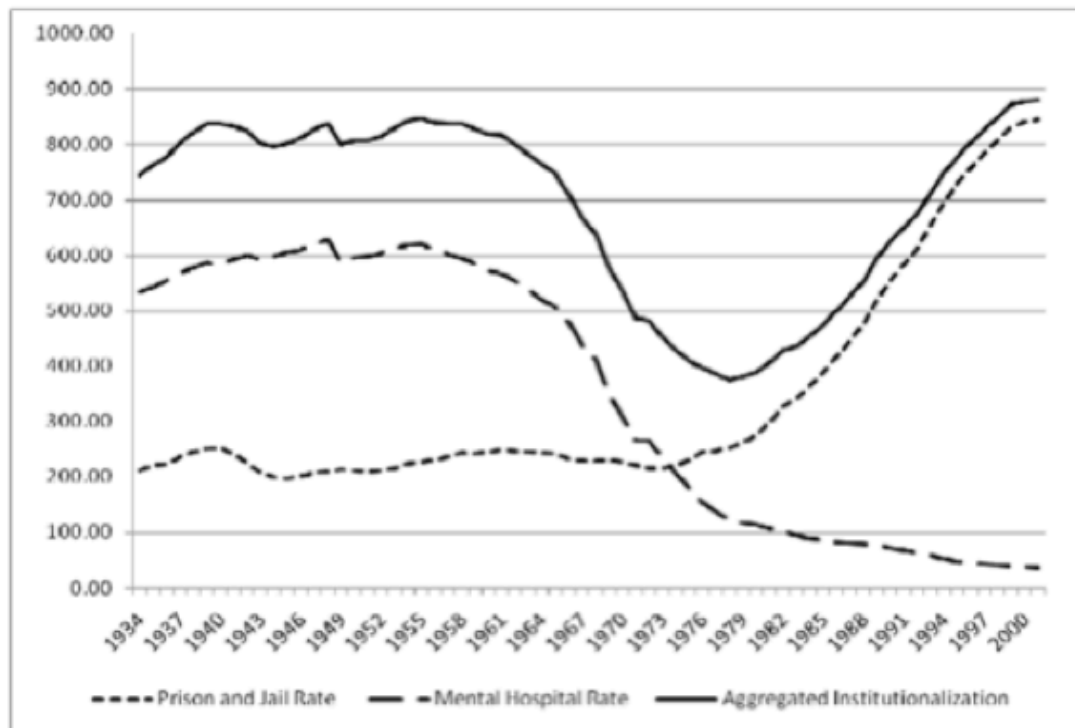
- Harris, A. C., and Madden, G. J. (2002). Delay discounting and performance on the prisoner's dilemma game. *Psychol. Rec.* 52, 429–440. - See more at: <http://journal.frontiersin.org/Journal/10.3389/fpsyg.2013.00355/full#sthash.b3vvTIpN.dpuf>
- Human Rights Watch. (2003). *Ill Equipped U.S. Prisons and Offenders with Mental Illness*. New York, NY: Human Rights Watch.
- James, D. J., & Glaze, L. E. (2006). Mental Health Problems of Prison and Jail Inmates. *Bureau of Justice Statistics*. Retrieved from <http://www.bjs.gov>
- Kapp, S. A. (2000). Pathways to Prison: Life Histories of Former Clients of the Child Welfare and Juvenile Justice Systems. *Journal of Sociology and Social Welfare*, 27(3), 63-74.
- Kemshall, H., Marsland, L., Boeck, T., & Dunkerton, L. (2006). Young People, Pathways, and Crime: Beyond Risk Factors. *The Australian and New Zealand Journal of Criminology*, 39(3), 354-370.
- Klien, K., Forehand, R., Armistead, L., & Long, P. (1997). Delinquency During the Transition to Early Adulthood: Family and Parenting Predictors From Early Adolescence. *Adolescence*, 32(125), 61-80.
- Kupers, T. A. (2006). How to Create Madness in Prison. From David Jones Ed., *Humane Prisons*. Oxford: Radcliffe Publishing.
- Lynch, S. M., DeHart, D. D., Belknap, J. E., Green, B. L., Dass-Brailsford, P., Johnson, K. A., & Whalley, E. (2014). A Multisite Study of the Prevalence of Serious Mental Illness, PTSD, and Substance Use Disorders of Women in Jail. *Psychiatric Services in Advance*, 1-5.

- Michaelson, L., de la Vega, A., Chatham, C. H., & Munakata, Y. (2013). Delaying Gratification Depends on Social Trust. *Frontiers Psychology*, 4, 1-7.
- Morrissey, J. P., & Goldman, H. H. (1986). Care and Treatment of the Mentally Ill in the United States: Historical Developments and Reforms. *The ANNALS of the American Academy of Political and Social Science*, 484, 12-27.
- National Institute of Mental Health. (2014). Retrieved from <http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml>
- Nijhof, K. S., De Kemp, R. A. T., & Engels, R. C. M. E. (2009). Frequency and Seriousness of Parental Offending and Their Impact on Juvenile Offending. *Journal of Adolescence*, 32, 893-908.
- Pollock, V. E., Scheider, L.S., Gabrielli, W. F., & Goodwin, D. W. (1987) Sex of a parent and offspring in the transmission of alcoholism: A meta-analysis. *J. Nerv. Ment. Dis.* 175(11), 668-673.
- Rodriquez, S. (2012). Solitary Confinement: FAQ. *Solitary Watch: News from a Nation in Lockdown*. Retrieved from <http://solitarywatch.com/faq>
- Raphael, S. (2000). The Deinstitutionalization of the Mentally Ill and Growth in the U.S. Prison Populations: 1971 to 1996. University of California, Berkley. Unpublished manuscript.
- Travis, J. (2005). *But They All Come Back: Facing the Challenges of Prisoner Reentry*. Washington, DC: The Urban Institute Press.
- Steadman, H. J., Osher, F. C. Robbins, P. C., Case, B., & Samuels, S. (2009). Prevalence of Serious Mental Illness Among Jail Inmates. *Psychiatric Services*, 60(6), 761-765.

- Torrey, E. F., Kennard, A. D., Eslinger, D., Lamb, R., & Palve, J. (2010). More Mentally Ill Persons Are in Jails and Prisons Than Hospitals: A Survey of the States. *Treatment Advocacy Center*, 1-19.
- Turanovic, J. J., & Pratt, T. C. (2013). The Consequences of Maladaptive Coping: Integrating General Strain Theory and Self-Control Theories to Specify a Casual Pathway Between Victimization and Offending. *J Quant Criminol*, 29, 321-345.
- Williams, L. M. (2004). Researcher-Advocate Collaborations to End Violence Against Women: Toward Liberating Methodologies for Action Research. *Journal of Interpersonal Violence*, 19(11), 1350-1357.
- Wolff, N., Blitz, C. L., Shi, J. (2007). Rates of Sexual Victimization in Prison for Inmates With and Without Mental Disorders. *Psychiatric Services*, 58(8), 1087-1094.

APPENDIX

I. APPENDIX A: Rate of Institutionalization in the United States from 1934 to 2000



Rate of Institutionalization in the United States (including jail populations) per 100,000 adults (Harcourt, 2011)

II. APPENDIX B: The Finalized Survey, Boulder County Jail Study: Personality, Health and Decision Making Survey

I. DEMOGRAPHIC

First, please answer the following demographic questions. These questions will help us to understand some general information about our research sample.

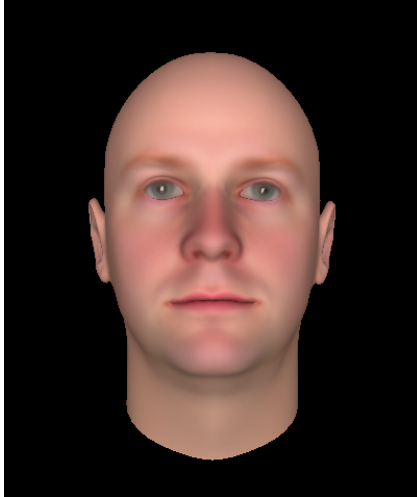
1. What is your age? _____
2. What is your sex/gender? ☐ Male ☐ Female ☐ Other sex/gender identity
3. Race/Ethnicity: Do you consider yourself... (please check all that apply)?
 - ☐ White/Caucasian
 - ☐ Latino/Latina/Hispanic
 - ☐ American Indian/Alaska Native/Native American
 - ☐ Black/African American
 - ☐ Asian American
 - ☐ Native Hawaiian or other Pacific Islander
 - ☐ More than one race (please specify or fill in more than 1 above) _____
 - ☐ Other (please specify) _____
4. EDUCATION: Which of the following best describes your highest achieved education level?

_____ Did not enter high school	_____ Some college
_____ Some high school	_____ College degree
_____ Received GED	_____ Graduate work/degree
_____ Graduated from high school (other than GED)	
5. CHILDREN
 - A. How many children do you have under the age of 18 (0-17 years old)? _____
 - B. How many children do you have 18 years old and older? _____
 - C. If you have minor children (children under 18), who is taking care of them while you're in this jail? _____
6. EMPLOYMENT
 - A. What was your employment status prior to your current incarceration? (please check one):
☐ full-time ☐ part-time ☐ occasional ☐ disability/SSI ☐ not employed
 - B. What year did you last work?: _____
 - C. What was your income the last 12 months you worked?: \$ _____
7. RELATIONSHIP/MARITAL STATUS prior to incarceration (please check one):
☐ single ☐ divorced ☐ widowed ☐ married ☐ living with partner
☐ not living with current partner (but in committed relationship)

II. DECISION-MAKING

A) Biography

Next, please read the following short biography. Take your time and read carefully. In the next section, you'll be asked some questions about this individual.



Alfred Zizzo

Alfred Zizzo was born on January 12, 1977, in Chicago, Illinois. After finishing school at Evanston Township High School in June of 1994, he became a student at Purdue University in Lafayette, Indiana, the next September. Zizzo got his degree in math in June of 1998.

After that, he worked for two years at General Motors in Toledo, Ohio. In the fall of 2000, he began graduate school in New York. He now lives in Brooklyn.

Here is an article from the Purdue University's newspaper on January 10, 2003:

"Student just misses flight that crashes"

Previous Purdue student Alfred Zizzo, 25, yesterday was very close to being the twenty-first person killed in a US Airways Express crash. The flight crashed soon after takeoff yesterday morning from the airport in Charlotte, North Carolina.

Because of heavy rush-hour traffic on the morning of January 9, Zizzo showed up at the airport to find out that flight 5481 had pushed back from the gate just seconds earlier. James Whitaker, 42, of Greenville, South Carolina, the passenger who had gotten Zizzo's seat, was not as lucky.

In a telephone conversation, Zizzo seemed to be upset by the close call. He felt bad for the families of Whitaker and the other victims, but swore to continue with his trip. "You can't control fate," he explained.

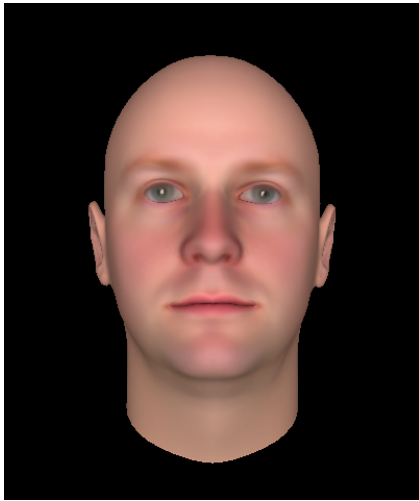
B. Decision-Making Questions

In this section, you'll be asked a number of questions about Alfred Zizzo. All of the questions involve imaginary decisions about money.

Although these questions are imaginary, please consider each choice as if you were actually going to receive the option you select. Take your time and read carefully.

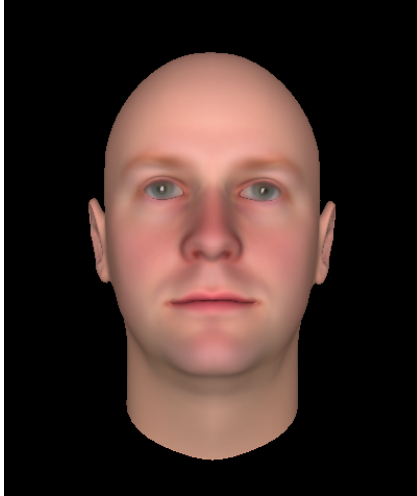
To be clear, you will NOT be paid for participating in this survey.

Please mark your answers by filling in the circle next to your preferred option.



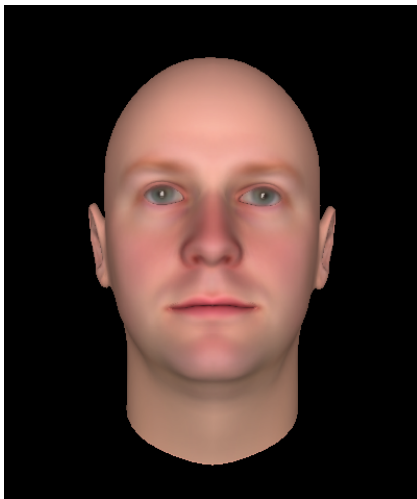
1. If Alfred Zizzo offered you \$5 now or \$34 in 14 days, which would you choose?
 - ☐ \$5 now
 - ☐ \$34 in 14 days
2. If Alfred Zizzo offered you \$5 now or \$30 in 4 days, which would you choose?
 - ☐ \$5 now
 - ☐ \$30 in 4 days
3. If Alfred Zizzo offered you \$5 now or \$14 in 21 days, which would you choose?
 - ☐ \$5 now
 - ☐ \$14 in 21 days
4. If Alfred Zizzo offered you \$5 now or \$30 in 7 days, which would you choose?
 - ☐ \$5 now
 - ☐ \$30 in 7 days
5. If Alfred Zizzo offered you \$5 now or \$34 in 4 days, which would you choose?
 - ☐ \$5 now
 - ☐ \$34 in 4 days

6. If Alfred Zizzo offered you \$5 now or \$30 in 21 days, which would you choose?
- ☐ \$5 now
 - ☐ \$30 in 21 days
7. If Alfred Zizzo offered you \$5 now or \$34 in 90 days, which would you choose?
- ☐ \$5 now
 - ☐ \$34 in 90 days
8. If Alfred Zizzo offered you \$5 now or \$22 in 7 days, which would you choose?
- ☐ \$5 now
 - ☐ \$22 in 7 days
9. If Alfred Zizzo offered you \$5 now or \$18 in 21 days, which would you choose?
- ☐ \$5 now
 - ☐ \$18 in 21 days
10. If Alfred Zizzo offered you \$5 now or \$30 in 42 days, which would you choose?
- ☐ \$5 now
 - ☐ \$30 in 42 days
11. If Alfred Zizzo offered you \$5 now or \$22 in 14 days, which would you choose?
- ☐ \$5 now
 - ☐ \$22 in 14 days
12. If Alfred Zizzo offered you \$5 now or \$34 in 21 days, which would you choose?
- ☐ \$5 now
 - ☐ \$34 in 21 days
13. If Alfred Zizzo offered you \$5 now or \$14 in 7 days, which would you choose?
- ☐ \$5 now
 - ☐ \$14 in 7 days
14. If Alfred Zizzo offered you \$5 now or \$11 in 150 days, which would you choose?
- ☐ \$5 now
 - ☐ \$11 in 150 days
15. If Alfred Zizzo offered you \$5 now or \$11 in 14 days, which would you choose?
- ☐ \$5 now
 - ☐ \$11 in 14 days



16. If Alfred Zizzo offered you \$5 now or \$11 in 4 days, which would you choose?
- ☐ \$5 now
 - ☐ \$11 in 4 days
17. If Alfred Zizzo offered you \$5 now or \$30 in 90 days, which would you choose?
- ☐ \$5 now
 - ☐ \$30 in 90 days
18. If Alfred Zizzo offered you \$5 now or \$18 in 4 days, which would you choose?
- ☐ \$5 now
 - ☐ \$18 in 4 days
19. If Alfred Zizzo offered you \$5 now or \$26 in 90 days, which would you choose?
- ☐ \$5 now
 - ☐ \$26 in 90 days
20. If Alfred Zizzo offered you \$5 now or \$14 in 4 days, which would you choose?
- ☐ \$5 now
 - ☐ \$14 in 4 days
21. If Alfred Zizzo offered you \$5 now or \$26 in 7 days, which would you choose?
- ☐ \$5 now
 - ☐ \$26 in 7 days
22. If Alfred Zizzo offered you \$5 now or \$26 in 150 days, which would you choose?
- ☐ \$5 now
 - ☐ \$26 in 150 days
23. If Alfred Zizzo offered you \$5 now or \$26 in 4 days, which would you choose?
- ☐ \$5 now
 - ☐ \$26 in 4 days

24. If Alfred Zizzo offered you \$5 now or \$22 in 90 days, which would you choose?
- ☐ \$5 now
 - ☐ \$22 in 90 days
25. If Alfred Zizzo offered you \$5 now or \$34 in 150 days, which would you choose?
- ☐ \$5 now
 - ☐ \$34 in 150 days
26. If Alfred Zizzo offered you \$5 now or \$18 in 150 days, which would you choose?
- ☐ \$5 now
 - ☐ \$18 in 150 days
27. If Alfred Zizzo offered you \$5 now or \$30 in 150 days, which would you choose?
- ☐ \$5 now
 - ☐ \$30 in 150 days
28. If Alfred Zizzo offered you \$5 now or \$18 in 42 days, which would you choose?
- ☐ \$5 now
 - ☐ \$18 in 42 days
29. If Alfred Zizzo offered you \$5 now or \$14 in 14 days, which would you choose?
- ☐ \$5 now
 - ☐ \$14 in 14 days
30. If Alfred Zizzo offered you \$5 now or \$14 in 150 days, which would you choose?
- ☐ \$5 now
 - ☐ \$14 in 150 days



31. If Alfred Zizzo offered you \$5 now or \$11 in 90 days, which would you choose?
- ☐ \$5 now
 - ☐ \$11 in 90 days
32. If Alfred Zizzo offered you \$5 now or \$34 in 42 days, which would you choose?
- ☐ \$5 now
 - ☐ \$34 in 42 days
33. If Alfred Zizzo offered you \$5 now or \$14 in 42 days, which would you choose?
- ☐ \$5 now
 - ☐ \$14 in 42 days
34. If Alfred Zizzo offered you \$5 now or \$22 in 150 days, which would you choose?
- ☐ \$5 now
 - ☐ \$22 in 150 days
35. If Alfred Zizzo offered you \$5 now or \$30 in 14 days, which would you choose?
- ☐ \$5 now
 - ☐ \$30 in 14 days
36. If Alfred Zizzo offered you \$5 now or \$11 in 42 days, which would you choose?
- ☐ \$5 now
 - ☐ \$11 in 42 days
37. If Alfred Zizzo offered you \$5 now or \$34 in 7 days, which would you choose?
- ☐ \$5 now
 - ☐ \$34 in 7 days
38. If Alfred Zizzo offered you \$5 now or \$26 in 14 days, which would you choose?
- ☐ \$5 now
 - ☐ \$26 in 14 days
39. If Alfred Zizzo offered you \$5 now or \$26 in 21 days, which would you choose?
- ☐ \$5 now
 - ☐ \$26 in 21 days
40. If Alfred Zizzo offered you \$5 now or \$11 in 21 days, which would you choose?
- ☐ \$5 now
 - ☐ \$11 in 21 days
41. If Alfred Zizzo offered you \$5 now or \$18 in 90 days, which would you choose?
- ☐ \$5 now
 - ☐ \$18 in 90 days
42. If Alfred Zizzo offered you \$5 now or \$22 in 21 days, which would you choose?

- \$5 now
- \$22 in 21 days

43. If Alfred Zizzo offered you \$5 now or \$18 in 14 days, which would you choose?

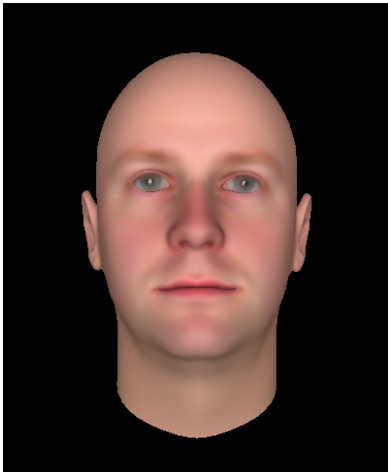
- \$5 now
- \$18 in 14 days

44. If Alfred Zizzo offered you \$5 now or \$26 in 42 days, which would you choose?

- \$5 now
- \$26 in 42 days

45. If Alfred Zizzo offered you \$5 now or \$22 in 4 days, which would you choose?

- \$5 now
- \$22 in 4 days



46. If Alfred Zizzo offered you \$5 now or \$22 in 42 days, which would you choose?

- \$5 now
- \$22 in 42 days

47. If Alfred Zizzo offered you \$5 now or \$18 in 7 days, which would you choose?

- \$5 now
- \$18 in 7 days

48. If Alfred Zizzo offered you \$5 now or \$14 in 90 days, which would you choose?

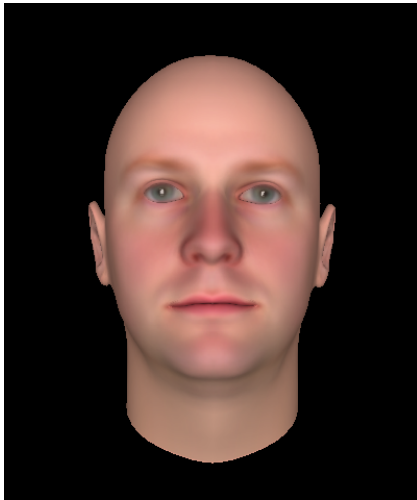
- \$5 now
- \$14 in 90 days

49. If Alfred Zizzo offered you \$5 now or \$11 in 7 days, which would you choose?

- \$5 now
- \$11 in 7 days

C. Personality Ratings (other)

Please use the following 7-point scale to rate Alfred Zizzo on the following traits and expectations.



Mark your choice with an X	1	2	3	4	5	6	7
Trustworthy (1 = not trustworthy, 4 = moderately trustworthy, 7 = very trustworthy)							
Likability (1 = not likable, 4 = moderately likable, 7 = very likable)							
Approachability (1 = not approachable, 4 = moderately approachable, 7 = very approachable)							
If another person were to trust Alfred Zizzo by sharing, with the expectation that Mr. Zizzo would share in return, what do you think are the chances that Mr. Zizzo would share or not share? (1 = not likely to share, 4 = moderately likely to share, 7 = very likely to share)							

D. Personality Ratings (self)

For the next section of the survey, please rate the extent to which each item describes **you**.

(1 = strongly inaccurate 6 = strongly accurate)

Please Circle your choice below:

	Strongly Inaccurate					Strongly Accurate
1. Can get along with most people	1	2	3	4	5	6
2. Have a good word for everyone	1	2	3	4	5	6
3. Value cooperation over competition	1	2	3	4	5	6
4. Believe that people are basically moral	1	2	3	4	5	6
5. Pull away from others	1	2	3	4	5	6
5. Am filled with doubts about things	1	2	3	4	5	6
7. Feel that life is not fair to you	1	2	3	4	5	6
8. Avoid contacts with others	1	2	3	4	5	6
9. Believe that most people would lie to get ahead	1	2	3	4	5	6
10. Find it hard to forgive others	1	2	3	4	5	6
11. Believe that people don't usually tell you the whole story	1	2	3	4	5	6

III. HEALTH HISTORY

1. Prior to intake at Boulder County Jail, did you receive any of the following mental health diagnoses? (please check all that apply)
 - ☐ Anxiety Disorder
 - ☐ Depression
 - ☐ Post Traumatic Stress Disorder
 - ☐ Schizophrenia
 - ☐ Bipolar Disorder
 - ☐ Other (please specify) _____

2. Prior to intake at Boulder County Jail, did you receive any of the following treatments for a mental health problem? (please check all that apply)
 - ☐ Group therapy
 - ☐ Individual Therapy
 - ☐ Medication
 - ☐ Inpatient treatment in a psychiatric facility
 - ☐ Other (please specify) _____

3. Since intake at Boulder County Jail, have you received any of the following mental health diagnoses? (please check all that apply)
 - ☐ Anxiety Disorder
 - ☐ Depression
 - ☐ Post Traumatic Stress Disorder
 - ☐ Schizophrenia
 - ☐ Bipolar Disorder
 - ☐ Other (please specify) _____

4. Since intake at Boulder County Jail, have you received any of the following treatments for a mental health problem? (please check all that apply)
 - ☐ Group therapy
 - ☐ Individual Therapy
 - ☐ Medication
 - ☐ Inpatient treatment in a psychiatric facility
 - ☐ Other (please specify) _____

PLEASE GO TO NEXT PAGE OF SURVEY

5. Was your mother ever diagnosed with any of the following? (check all that apply)

- ☐ Anxiety Disorder
- ☐ Depression
- ☐ Post Traumatic Stress Disorder
- ☐ Schizophrenia
- ☐ Bipolar Disorder
- ☐ Not sure/don't know
- ☐ Other (please specify) _____

6. Was your father ever diagnosed with any of the following? (check all that apply)

- ☐ Anxiety Disorder
- ☐ Depression
- ☐ Post Traumatic Stress Disorder
- ☐ Schizophrenia
- ☐ Bipolar Disorder
- ☐ Not sure/don't know
- ☐ Other (please specify) _____

7. Was your mother ever incarcerated in jail or prison?

- ☐ Yes ☐ No ☐ Don't know/not sure

8. Was your father ever incarcerated in jail or prison?

- ☐ Yes ☐ No ☐ Don't know/not sure

9. Alcohol/Drugs:

Do you think you are an alcoholic or have a drinking problem?

- ☐ Yes ☐ No ☐ Don't know/not sure

Do you think you have an addiction to any drugs (not including alcohol)?

- ☐ Yes ☐ No ☐ Don't know/not sure

If so, which drugs do you think you're addicted to? (please specify)

Have you ever been diagnosed with Substance Use Disorder (SUD)?

- ☐ Yes ☐ No ☐ Don't know/not sure

Brief Symptom Inventory (BSI)

The BSI 18 consists of a list of problems people sometimes have. Read each one carefully and circle the number of the response that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. Circle only one number for each problem. For example, if your response is "moderately" your answer would look like: 0 1 ⊖ 3 4
Please do not skip any items. If you change your mind, draw an X through your original answer and then circle your new answer (0 ~~X~~ 1 ⊖ 3 ④). Read the example before beginning. If you have any questions, please ask us.

x

EXAMPLE

0 = Not at all 1 = A little bit 2 = Moderately 3 = Quite a bit 4 = Extremely

HOW MUCH WERE YOU DISTRESSED BY:

Body aches.....0 1 2 3 ④

How Much Were You Distressed By:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Faintness or dizziness	0	1	2	3	4
2. Feeling no interest in things	0	1	2	3	4
3. Nervousness or shakiness inside	0	1	2	3	4
4. Pains in heart or chest	0	1	2	3	4
5. Feeling lonely	0	1	2	3	4
6. Feeling tense or keyed up	0	1	2	3	4
7. Nausea or upset stomach	0	1	2	3	4
8. Feeling blue	0	1	2	3	4
9. Suddenly scared for no reason	0	1	2	3	4
10. Trouble getting your breath	0	1	2	3	4
11. Feelings of worthlessness	0	1	2	3	4
12. Spells of terror or panic	0	1	2	3	4
13. Numbness or tingling in parts of your body	0	1	2	3	4
14. Feeling hopeless about the future	0	1	2	3	4
15. Feeling so restless you couldn't sit still	0	1	2	3	4
16. Feeling weak in parts of your body	0	1	2	3	4
17. Thoughts of ending your life	0	1	2	3	4
18. Feeling fearful	0	1	2	3	4

IV. OFFENDING AND VICTIMIZATION HISTORIES

1. For what offense(s) were you charged for your current incarceration (check all that apply)?

- ☐ Prostitution
- ☐ Probation/Parole violation
- ☐ Property
- ☐ Person (violent)
- ☐ Drug/Alcohol

6. Did you have any arrests as a juvenile?

- ☐ Yes ☐ No

7. Was the crime(s) for which you are currently incarcerated your first offense?

- ☐ Yes ☐ No

8. In addition to this incarceration, how many times have you been in jail before?

9. How many times have you been in prison? _____

10. Child Abuse Victimization(s): As a child (under the age of 18) how many times were you a victim of each of the following (please write 0 if never):

Type of Victimization as a Child	Number of Times Victimized:
Sexual abuse (including rape)	
Physical abuse	
Neglect by a parent or guardian	
Robbery	
Witness domestic violence by/of your parent(s)?	
Witness other violence?	

Please write the number of times you experienced each victimization in these

11. Victimization as an Adult: Since the age of 18, how many times have you been a victim of each of the following (please write 0 if never):

Type of Victimization as an Adult	Number of Times Victimized
Sexual abuse (including rape)	
Physical assault (by someone not a partner/spouse)	
Domestic violence (by a current or former partner/spouse)	
Robbery	
Witness a violent victimization of someone else?	

V. CONCLUDING QUESTIONS

1. What helps empower you or makes you feel better about yourself while you're in jail?
2. What are your long term goals?
3. This is the end of the survey. Is there anything you would like to add or anything you would like to ask?
4. Do you have feedback about the survey? Are there questions you think we should or should not ask? Things we should change?

How are You Feeling After Participating in this Study/Survey?

You have just answered many questions about your life experiences, including experiences of interpersonal violence and current mental health. Sometimes individuals experience some distress when they think about their past experiences and their current feelings about them; especially if they try not to think about them a lot of the time. This is a normal response and usually decreases within a short period of time. Other individuals feel some relief and even glad that they talked about their experiences. Often times, an individual will experience both relief and some sad or angry feelings. If you continue to feel distress after today or feel very intense feelings, you can contact any of the staff in the Boulder County Jail to ask for an appointment for psychological assistance. If you know you would like that now, please let us know when you hand this in. Thank you again for taking this time to share your experiences with us.

Statement of Appreciation

We want to thank you for participating in this survey. We hope that you are glad that you chose to participate. If you have any additional questions about the study, we would be happy to answer them.

III. APPENDIX C: The Letter of Agreement from the Boulder County Jail



JOE PELLE
Sheriff

Boulder County Sheriff's Office

Letter of Agreement

February 13, 2014

Dear Dr. Joanne Belknap,

I am familiar with your research project proposed to be conducted by distributing a survey you and your research team have designed, entitled "Trust, Decision-Making, and Mental Health" to sentenced inmates in the Boulder County Jail. I understand the role of Boulder County Jail to be allowing and facilitating inmates who qualify for the study to learn more about the study, and if interested in taking part, to sign the consent form you designed, and complete your self-report, anonymous survey "Trust, Decision-Making, and Mental Health." I have read the survey, which includes questions on the inmates' demographic characteristics (e.g., race, age, gender, education, etc.), Trust and Decision-Making Questions, Health History (primarily mental health histories, including the Brief Symptom Inventory [BSI]), Offending and Victimization Histories, and Concluding Questions (e.g., their feedback on the survey and some strength-based questions about their goals).

We have also discussed the role of Boulder County Jail Classification Officers and staff and I am satisfied that their safety and welfare are adequately protected as described in the research protocol. In addition, I understand that this research will be carried out following sound ethical principles and that involvement in this research, for both University of Colorado Boulder and Boulder County Jail, is strictly voluntary and guarantees the protection of the participants' privacy with a few exceptions: In the unlikely event that participant(s) would report on the survey their intentions to harm someone else or themselves or that they have information regarding an unsolved crime, the research team is required to report this to the BCJ and provide information about the participant (e.g., demographic survey data and the list of names of participants) to identify the participant. This is unlikely in that we have no questions about harming selves or others or asking about information on unsolved crimes in the survey. Otherwise, I understand that the investigator cannot provide me with data that might allow anyone other than the research team to identify anyone's answers unless permission has been specifically given by the subject. The Boulder County Jail agrees that there will be no compensation to inmates for their participation in the survey."

Therefore, as a representative of Boulder County Jail, I agree to allow you to conduct your research at our agency/institution.

Sincerely,

A handwritten signature in dark ink, appearing to read "Doug Caven", with the number "#1404" written next to it.

Douglas R. Caven, #1404
Commander

Headquarters
5600 Platiron Parkway

Communications - Emergency Management
3280 Airport Road

Jail
3200 Airport Road

IV: APPENDIX D: The Final Protocol Approved by the Institutional Review Board



TITLE: Boulder County Jail Survey: Trust, Decision-Making, and Mental Health

PROTOCOL VERSION DATE: February 19, 2013

VERSION: 3

PRINCIPAL INVESTIGATOR (PI):

Name: Joanne Belknap, Ph. D.

Address: Department of Sociology, University of Colorado Boulder, UCB 327,
Boulder CO 80309-0327

Telephone: 303-735-2182

Email: joanne.belknap@colorado.edu

KEY PERSONNEL

Name: Yuko Munakata, Ph. D.

Address: Department of Psychology and Neuroscience, University of Colorado
Boulder, 1905 Colorado Avenue, Muenzinger D244, UCB 345, Boulder CO 80309-
0345

Telephone: 303-495-5499

Email: munakata@colorado.edu

Role in project: Co-Investigator

Name: Laura Michaelson*

Role in project: Graduate Student Investigator, will help with data collection, entry,
analysis, and write-up.

Name: Olivia Kolodziejczak*

Role in Project: Undergraduate Student Investigator, will help with data collection,
entry, analysis, and write-up.

Name: Abigail Cher*

Role in project: Undergraduate Student Investigator, will help with data collection,
entry, analysis, and write-up.

All of the student investigators have been key in designing the study, and they will
be very active in carrying it through to publication should it be IRB approved.

I. OBJECTIVES

The purpose and rationale of this research is twofold. First, we want to gather knowledge on mental health and second, to explore the relationship between social trust and willingness to delay gratification in a population that notoriously struggles to delay rewards: individuals who commit crimes. We also hope to see how these variables are related to each other as well as the participants' prior victimization and offending histories. For example, we plan to examine whether the mental health of the respondents mediates or moderates their social trust and willingness to delay gratification.

II. BACKGROUND AND SIGNIFICANCE

The Boulder County Jail (BCJ) has expressed interest in two CU-B departments, Sociology and Psychology, to conduct research on the inmates. When faculty (Drs. Belknap and Munakata) in both departments were interested to design and conduct a study on the BCJ inmates, we were asked if we could combine our studies into one survey to make it easier for both the jail staff and the jail inmates (to collect data once instead of twice). Dr. Belknap with her student, Olivia Kolodziejczak, wants to examine mental health/illness indicators to determine their frequencies/rates, and to whether (and if so, how) they are related to the inmates' offending and victimization histories, as well as their demographic characteristics (e.g., age, gender, race, relationship status, etc.). Nationally and in CO, jail administrators have reported that the presence of persons with mental illness is an increasing problem (e.g., Steadman et al. 2009). Jail administrators and staff often report being ill-equipped to handle behaviors symptomatic of mental illness, and that inadequate community resources contributed to these inmates 'cycling' in and out of jails, with negative consequences including jail overcrowding and increased pharmacological costs. Moreover, research documents the high degree of trauma in inmates' backgrounds, which could be related to their mental health (e.g., DeHart et al. forthcoming; Lynch et al. forthcoming). Compared to others, they tend to have extraordinarily high rates of anxiety (Sered & Norton-Hawk, 2008), depression (Sered & Norton-Hawk, 2008), and other serious psychiatric illnesses such as posttraumatic stress, and antisocial personality, lifetime bipolar, and borderline personality disorders (BPD) (e.g., Lewis, 2006; Sered & Norton-Hawk, 2008). Moreover, inmates with mental illness are more likely to commit both nonviolent and violent offenses than their non-mentally ill counterparts (e.g., Felson, Silver, & Remster, 2012), and PTSD and substance use disorder are often co-occur with serious mental illness among jail inmates (Lynch et al. forthcoming). Finally, traumas are also related to substance use disorder, offending, and serious mental illness (e.g., DeHart et al., forthcoming; Lynch et al., forthcoming).

Dr. Munakata, with her students, Abigail Cher and Laura Michaelson, wants to study whether social context influences decisions about whether to delay gratification for future rewards. Delaying gratification is critical to individual and societal success, yet the influence of various social and emotional factors on delaying gratification is not well understood. Existing research is consistent with the idea that social-emotional contexts influence delay decisions (e.g., Harris & Madden, 2003; Mahrer, 1956; Michaelson, de la Vega, Chatham, & Munakata, 2013; Mischel, 1961), but specific populations that are notoriously impulsive (for example, criminals) have not been broadly explored.

Social trust is a factor of particular interest because when decisions about the future are contingent on the actions or behaviors of other individuals, social trust can serve as an important predictive cue. Delaying gratification relies on the assumption that the future reward will be delivered as promised or expected. Thus, if an individual has reason not to trust the person or institution promising the future reward, it may make sense to behave “impulsively” and accept an immediate reward, regardless of the value of the delayed reward. This suggests that a lack of social trust may help to explain why certain populations exhibit particular difficulty delaying gratification, in addition to other established factors such as reward sensitivity and self-control.

All adults sometimes struggle with delay choices, but certain populations face particular difficulty—such as children, addicts, criminals, and obese individuals (Anokhin, Goloshchekin, Grant, & Heath, 2011; Casey et al., 2011; Hongwamishkul, Happaney, Lee, & Zelazo, 2005; Johnson, Bickel, & Baker, 2007; Wulfurt, Block, Santa Ana, Rodriguez, & Colsman, 2002). The present study focuses on a prison population to investigate the role of social trust in prisoners’ decision-making processes, and would contribute to an ongoing line of work in our lab exploring the influence of social-emotional context on EF. Prior research demonstrates increased preferences for immediate rewards in individuals who commit crimes (Arantes, Berg, Lawlor, & Grace, 2013; Petry, 2002), and recent work has begun to examine levels of social trust in prisoners (Khadjavi & Lange, 2013), but no studies have examined the relationship between social trust, delay of gratification, and crime. Identifying factors in delay of gratification that have been overlooked could enhance our general understanding of the typical development of this important skill, and could also improve intervention strategies for criminals and other at-risk populations.

III. PRELIMINARY STUDIES

Regarding the first portion of the study, some research has been conducted to examine mental illness/health, offending, and trauma/victimization among inmates (e.g., DeHart et al., forthcoming; Lynch et al., forthcoming; Steadman et al. 2009), but these studies are primarily on one gender/sex (i.e., only men inmates or only women inmates). No preliminary studies have been conducted to address the social trust standardized measures among inmates proposed in the current study.

IV. RESEARCH STUDY DESIGN

This will be survey research, in which participants will be asked to make hypothetical choices about rewards and to report their level of trust in various organizations, computer generated faces, and hypothetical lenders and borrowers of money. The intended sample size is 100 subjects but if we are able to collect data on more subjects, we will. It is unlikely the sample will be much more than 100 but it could be up to 200. There are five sections to the survey: (I) Demographic items, (II) Decision-making and personality items; (III) Health items; (IV) Brief offending and victimization history items; and (V) Concluding items, ending with strength-based questions and the participants’ perceptions of the survey/study. The Boulder County Jail (BCJ) opened in 1988 and was designed to hold 287 inmates, but can

house as many as 536 inmates
(<http://www.bouldercounty.org/dept/sheriff/pages/jail.aspx>).

V. ABOUT THE SUBJECTS

The subjects will be inmates at the Boulder County Jail (BCJ). The intended sample size is 100 subjects, but perhaps as many as 200 BCJ inmates. The sampled subjects will be both men and women, 18 years old and older, who have already been sentenced. Sgt. Lydia Mitchell will instruct BCJ staff to list by module, who has already been sentenced and is over 17 years old, so that they qualify for participation in the study. These names will be provided to the staff in the various modules from which potential participants will be drawn. Potential subjects will not be excluded on the basis of demographic variables except that they must be able to speak and read English. (Although research team members can help read the consent and survey items.)

VULNERABLE POPULATIONS

The survey will be administered to inmates at the Boulder County Jail (BCJ) by module in which the inmate is housed. First, BCJ plain clothes staff (e.g., therapists and program instructors) will inform the inmates of the study (Appendix A flyer). Second, of those inmates who qualify in each module and want to learn more about the study, will be brought to a room where the research team will conduct the verbal pre-briefing. Specifically, before reading the consent form (Appendix D, which can be relatively technical), the research team members will go over the cover letter (Appendix C) and provide the inmates with a simplified explanation of the study and the consent process. In the verbal pre-briefing and on the cover sheet, both the verbal pre-briefing and the documents will make all subjects aware that their participation is entirely voluntary, and that they are free to skip any questions and withdraw from the study at any time without penalty. Participants will also be reminded that they will not receive any compensation for participating, and participation will not influence their (already determined) jail sentence in any way.

VI. RECRUITMENT METHODS

Participants will be inmates recruited from the Boulder County Jail (BCJ). All participants will be made aware that their participation in our research is entirely voluntary and even if they consent to participating in the survey, they are free to skip any survey questions and/or withdraw at any time without penalty. The BCJ administrators, particularly Sgt. Lydia Mitchell, worked closely with the CU research team to design the proposed study. The original sampling plan was 25% of each module, but now that we are restricting our sample to only post-sentenced inmates, we plan to sample all of the post-sentenced inmates in 11 modules at the BCJ. (Understandably, we are not allowed to sample inmates from the disciplinary module.) After collecting completed surveys from all participating subjects, no secondary/follow-up solicitations or reminders will be needed.

Prior to data collection, the day before the first (and possibly only) recruitment date, plain clothes BCJ staff (e.g., therapists and program instructors) will supply the inmates with the flyer (Appendix A) and explain that the CU study is being conducted and that all sentenced inmates will likely be invited to participate in the study. These BCJ staff will inform the inmates briefly what the study is about (personality, decision-making, health, but also brief prior victimization and offending history questions), and tell them that their participation is entirely voluntary, and that going to learn about the study from the CU researchers does not commit them to participating in or completing the study. Likely the following day (or within a few days), the eligible (sentenced and over age 17) inmates from the 11 modules designated for the study will be escorted by the plain clothes BCJ staff to a room where one or more CU research team member will hand each inmate who attends a manila envelope with the consent form, the cover letter, and the survey. The research team representative will describe the study and go over the consent form and cover letter and answer any questions the inmates have about the study, the survey, the consent form, the survey, and so on. Inmates can choose to simply “doodle” on their surveys, sit quietly, or take the survey. For inmates who want to participate, they will hand in their consent forms separately from their completed surveys and the surveys and consent forms will be in separate piles and routinely shuffled so that specific surveys cannot be connected back to specific consent forms. It is expected that the survey will take 30-45 minutes and that all inmates eligible for participation will be escorted back to their modules upon completion of the survey.

Although official correctional staff will be available outside of the room where inmates are provided with the survey (in the case of some kind of misbehavior), the room for the study will be the inmates, the research team member(s), and the plain clothes jail staff (e.g., therapists and program instructors). Only the research staff will handle the surveys and consent forms.

It is possible we might pilot-test the survey on a few inmates before we start the initial study to get their feedback on the survey and to test how long it takes. It will be tested on psychology students prior to being used in the jail (assuming approval by the CU IRB).

All CU study team members will be informed about the appropriate behavior and clothing for conducting the study (see Appendix A).

The plan is to collect the study data during Spring Semester 2014. In the case that this does not allow for sufficient numbers, we will continue to collect data during Summer 2014, and if this is not sufficient, in Fall 2014. However, we believe we should be done with data collection in Spring 2014 and are only offering the following semesters if we have insufficient N's to conduct the data analyses.

Sgt. Mitchell will set up the BCJ for identifying the eligible inmates and appointing the BJS staff bringing them to the room to learn more about the study and participate if they choose (module by module). In sum, the BCJ staff assisting with the data collection will be the plain clothes staff in order to minimize any sense that inmates may feel coerced to participate. The only exceptions will be the BCJ staff providing the plain clothes BCJ

staff with the names of those in the participating modules of whom is eligible (over 17 and already sentenced), and the inmates will determine for themselves their fluency in English in participating in the survey. BCJ staff are only involved in facilitating the design for data collection. They will not be involved in distributing or collecting the cover letters, consent forms, or surveys. They will not have access to these documents.

VII. COMPENSATION

When participants complete the survey, they will be debriefed by one or more members of the CU research team reminding them of the purpose of the research, and provided with resources for following up with any questions or concerns, including any request for psychological counseling. The BCJ is well-staffed with psychological experts already, and they will be available for any requests for study subjects if for any reason they are upset in any way after the survey participation. Indeed, many of the plain clothes BCJ employees helping with transporting and in the room during the survey completion will be mental health providers who work with the inmates. Participants will not be compensated financially or otherwise.

VIII. CONSENT PROCESS

Informed consent will be obtained from all participants prior to testing. The consent form is on the second page of the survey (Appendix D). One or more members of the CU research team will distribute the cover letter, consent form and survey, describing all of them to the potential participants. Eligible inmates will decide if they want to participate after informed verbal and written descriptions are covered. Participation does not require completion of the survey or deciding not to take part after all.

To avoid coercion, the cover sheet explicitly states that subjects are free to choose whether or not they would like to participate, and they will not be compensated for participation, nor will participation influence their sentence at the Boulder County Jail.

IX. PROCESS TO DOCUMENT CONSENT IN WRITING

The versions of the consent forms to be used for this research include a consent form for unpaid adult participants age 18 and older who speak/read English.

X. PROCEDURES

- Plain clothes BCJ staff (e.g., therapists and program instructors) will distribute a flyer (Appendix A) describing the study one or more days before the CU research team arrives at BCJ to collect data.
- By module, eligible participants (those already sentenced, Over 17 years old, and comfortable with a survey in English) will be asked if they want to meet with one

- or more members of the CU research team in a room with other eligible and interested participants, to learn more about the study. These inmates will be escorted by the plain clothes BC J staff to a room where the CU research team member(s) will give each inmate an envelope with the cover letter (Appendix C), the Consent Form (Appendix D), and the Survey (Appendix E). The CU research team member(s) will then go over the cover letter, consent form and survey (while the plain clothes staff members are present in the room).
- The eligible inmates will decide whether to take part or to sit quietly and/or doodle on the survey while other inmates participate in the survey.
 - Survey Sections (Complete Survey is in Appendix F)
 - Demographic (e.g., age, race, gender, education, etc.)
 - Decision-making and Trust Ratings
 - Biography: a short biography about a fictional character who is featured in the choice questions
 - Choice Questions: To measure delay of gratification, participants will be asked to choose between one small monetary reward immediately and a larger monetary reward after a delay. All rewards are hypothetical, and this is made clear to the participant.
 - Trust/Personality Ratings: Participants will rate the character from the fictional biography on traits such as trustworthiness and likability
 - Trust/Personality Questions: Participants will be asked to self-report their tendencies to trust or distrust others.
 - Health History: Primarily the Brief Symptom Inventory (BSI) purchased by the PI specifically for the proposed study, and also questions adapted from prior research by the PI with input from the current research team.
 - Brief Offending and Victimization Histories: Adapted from prior research by the PI
 - Concluding Questions: About their perceptions of the survey and anything else they would like to add, but also some “strengths-based” questions about their futures.
 - The survey should take an average of 30-45 minutes in total to complete .
 - When inmates hand in materials (completed and uncompleted surveys, consent forms, etc.), CU research team members will ensure there is a signed consent form for every survey participant, but keep them in different piles to ensure they cannot be matched. Inmates will be allowed to keep a copy of the consent form and the cover letter in the case that they wish to contact the research PI (Belknap) and/or the CU IRB.
 - Following completion of the survey, participants will be verbally debriefed by one or more members of the CU research team. Participants will also be encouraged to communicate any comments, questions, or concerns to the researchers by submitting a request through a member of the research team or if they are more comfortable, a member of the BCJ staff. Regardless of how an inmate may communicate a wish to speak to a mental health care provider following the survey, such providers will be made available to them. (Although, given prior

- research by the PI it is unlikely that participants will request such mental health assistance from participating in the survey.)
- Inmates will be escorted in groups back to their modules by the plain clothes BCJ staff after turning in their surveys and consent forms and the verbal debriefing.
 - These procedures will be repeated for each BCJ module (except the disciplinary module).

XI. DATA MANAGEMENT

Confidentiality will be protected by assigning a numbered code, known only by the principal researcher, to each participant so that, with the exception of the consent form, the identity of each participant is not revealed in the survey. All hardcopy data and records will be stored in a locked room within the Cognitive Development Center, which is also locked. All consent forms will be stored separately to ensure no data can be identifiable. Only co-investigators listed on the IRB protocol will have access to the data. Co-investigators can access data remotely using VPN. For data that is originally captured as a hardcopy and then transcribed to electronic files (e.g., surveys), the hardcopy will be separately filed in a locked office and the electronic data will be stored on the secure lab server. After the conclusion of the research, all hardcopy data will be kept indefinitely in a locked room, and electronic data will be stored indefinitely on the secure lab server. Retaining this data will allow researchers to refer back to previous procedures to replicate them, to confirm the validity of reported results, and to conduct further measures and analyses of participants' behavior, with appropriate IRB approval. Standard strict procedures of confidentiality will continue to apply.

XII. WITHDRAWAL OF PARTICIPANTS

If participants did not comprehend task instructions in the way that we intended, or were unable to follow study procedures, their data will not be included in final analyses, but all possible measures will be taken to ensure that participants have a positive experience regardless of the status of their data.

When subjects are withdrawn from the research, they will be replaced with newly recruited subjects. Their incomplete or unusable data will be stored securely, along with the data from the rest of the sample. No further follow-up will be necessary.

MANAGEMENT OF RISKS

Risks of participation are minimal and no greater than that of everyday life. The consent form will include a general description of the topics included in the study and the debriefing form will explain specific project hypotheses and predictions. Adults who anticipate high levels of discomfort may decline to participate at the time of the consent review or at any point thereafter. The experimenter will explain to participants that they may decline to answer any questions that make them feel uncomfortable, and that they may withdraw from the study without penalty at any time.

XIII. POTENTIAL BENEFITS

Direct benefits to be gained by individual participants are few, but most participants appear to find the studies enjoyable. Participation in a research study is an educational experience for everyone involved in the study. By being told the purpose and rationale for the study, participants can learn about cognition and social-emotional processing. More likely benefits would accrue to society through the contribution of a greater understanding of the relationship between social trust and delay of gratification. This research could benefit prisoners by helping to explain their notoriously impulsive behavior in a less stigmatizing way, and could point to new intervention strategies to improve such behavior in criminals and in other populations who struggle with impulse control. Because the risks for participating are minimal, whatever benefits there are to be accrued by society will outweigh the risks.

XIV. PROVISIONS TO MONITOR THE DATA FOR THE SAFETY OF PARTICIPANTS

As the data are collected and coded, co-investigators will monitor for any adverse events. If there is any indication that study procedures are adversely affecting study participants, data collection will be terminated immediately, follow-up debriefing procedures will be specified, and alternative methods for addressing the present research questions will be explored.

XV. COST TO PARTICIPANTS

There will be no costs to the subject for their participation in the research, other than their time. If they are upset during or after the survey, there will be BCJ psychological staff available to treat them.

XVI. SHARING OF RESULTS WITH PARTICIPANTS

The participants will be provided with Dr. Belknap's information (snail mail, email, and phone number) should they want to contact her in the future for the study findings. Working with Sgt. Lydia Mitchell, Dr. Belknap also plans to present the findings to the jail staff. (Any of the other study collaborators are also welcome to help with this presentation.)

List of Appendices

- A: Flyer explaining study (to be provided to inmates by BCJ staff)
- B: Appropriate attire and behavior expected by research team for data collection
- C: Cover Letter
- D: Consent Form
- E: "Trust, Decision-Making, and Mental Health Survey" (designed for the proposed study)
- F: Research References
- G: Letter of Agreement from the Boulder County Jail

Would You Be Interested in Participating in a Study on Personality, Decision-Making, and Health?

We are from the Sociology and Psychology Departments at CU-Boulder. We hope to survey between 100 and 200 post-sentenced men and women in the Boulder County Jail about how you make decisions, your health, and your personalities.

- ***We are interested in offenders' personalities and decision-making and their health histories.*** Brief questions are also asked about your victimization and offending histories.
- Our goal is figure out what services women and men in jail need – while they are in jail, before they get to jail, or after they have been released, using standardized health and personality tests.
- The surveys are anonymous, confidential, and will take 30-45 minutes.
- ***Survey participation is voluntary.*** We want you to know you may be called out so that we can ask if you want to take part in our study. Coming to meet with us does not mean you have to be in the study: ***It is up to you to decide if you want to take part in the survey.***

VI. APPENDIX F: Boulder County Jail Consent Forms



Permission to Take Part in a Human Research Study

Title of research study: ***Boulder County Jail Study: Trust, Decision-Making and Mental Health (Protocol #13-0681)***

Investigator: ***Joanne Belknap, Ph.D.***

Why am I being invited to take part in a research study?

We invite you to take part in a research study because most of the research on inmates has been conducted on prison inmates and less is known about jail inmates. In particular, the research team is a combination of psychology and sociology professors and students at the University of Colorado-Boulder who are interested in the mental health histories and trust and decision-making aspects of offenders' lives.

What should I know about a research study?

- Someone will explain this research study to you.
- Whether or not you take part is up to you.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- You can ask all the questions you want before you decide.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk to the research team at ***Joanne Belknap at 303-735-2182 or joanne.belknap@colorado.edu***

This research has been reviewed and approved by an Institutional Review Board ("IRB"). You may talk to them at (303) 735-3702 or irbadmin@colorado.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research subject.
- You want to get information or provide input about this research.

Why is this research being done?

To better document the mental health of jail inmates and how jail inmates make decisions. The research team is composed of a sociology professor and student who are interested in mental health histories and a psychology professor and student who are interested in trust and decision-making among jail inmates. We collaborated to make one survey.

How long will the research last?

We anticipate that it will take 30 to 45 minutes for participants to complete this one-time survey.

How many people will be studied?

We expect about 100-200 people will be in this research study, all inmates at the Boulder County Jail.

What happens if I say yes, I want to be in this research?

You will be provided with an envelope with the study survey and a pen/pencil and you will take the survey if you decide to do so.

- ***The survey is expected to take 30 to 45 minutes, but we expect closer to 30 minutes.***
- ***You can skip any questions you don't want to answer.***
- ***You can quit the survey at any time. If you want, you can simply sit quietly or "doodle" on your survey.***
- ***The survey includes***
 - 1. Demographic questions (e.g., age, race/ethnicity, gender, etc.)***
 - 2. Trust and decision-making questions***
 - 3. Health questions***
 - 4. Brief offending and victimization history questions***
 - 5. Concluding questions***
- ***No other data will be collected other than what is in the anonymous survey.***
- ***BCJ staff, primarily therapists and program instructors will transport interested participants from their module to a room to learn more about the study and decide whether to participate***
- ***CU research team staff from the sociology and psychology departments***
- ***In the BCJ***
- ***During February 2014***
- ***Once per participating module***
- ***A written and anonymous survey***
- ***Following the survey, if any participants would like to speak to a trained BCJ mental health staff member, this will be made available***
- ***There are no ramifications/penalties for not taking part in the study***

What happens if I do not want to be in this research?

You can decide not to participate in the survey at any time and it will not be held against you.

What happens if I say yes, but I change my mind later?

You can decide not to participate in the survey at any time and it will not be held against you.

Is there any way being in this study could be bad for me?

It is possible but unlikely that you may feel uncomfortable answering some of the questions in the survey. If this is the case, feel free to stop participating, skip these questions, or ask to see a trained staff member who specializes in therapy.

Will being in this study help me any way?

We cannot promise any benefits to you or others from your taking part in this research. However, possible benefits include that you may feel you have a better understanding of yourself after answering the survey questions, and it is hoped that your answers may provide help in responding to at-risk (of offending) individuals outside of incarceration as well as to provide better treatment for and responses to jail inmates. Taking part in this research study will not improve your housing or correctional program assignments. Your taking part in this research study will not improve your chance of parole or release or have any impact on changing your sentence.

What happens to the information collected for the research?

Efforts will be made to limit the use and disclosure of your personal information, including research study and medical records, to people who have a need to review this information. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the IRB and other representatives of this organization.

No data will be collected on you other than what you report in the survey.

The password-encrypted data will be stored on the research teams' computers for 5 years.

Can I be removed from the research without my OK?

The person in charge of the research study or the sponsor can remove you from the research study without your approval. Possible reasons for removal include you are disruptive to others taking part in the study or you appear to be in an agitated or episodic state.

What else do I need to know?

If at any time participation in the study makes you feel uncomfortable, please stop and there will be no penalties. If you'd like to talk to a member of the BCJ psychological staff, please let one of the CU research team members or one of the BCJ staff present (therapists and/or program instructors) know and this will be provided. The study will be written up and orally reported only in a manner that individual participants may not be identified. Rather, patterns will be reported.

To obtain the results from this study please contact Dr. Joanne Belknap at joanne.belknap@colorado.edu or call her at 303-735-2182.

Signature Block for Capable Adult

Your signature documents your permission to take part in this research.

_____ Signature of subject	_____ Date
_____ Printed name of subject	
_____ Signature of person obtaining consent	_____ Date
_____ Printed name of person obtaining consent	<div style="border: 1px solid black; height: 30px; width: 100%;"></div> IRB Approval Date

[Add the following block if a witness will observe the consent process. E.g., short form of consent documentation or illiterate subjects.]

My signature below documents that the information in the consent document and any other written information was accurately explained to, and apparently understood by, the subject, and that consent was freely given by the subject.

_____ Signature of witness to consent process	_____ Date
_____ Printed name of person witnessing consent process	

VII. APPENDIX G: Boulder County Jail Cover Letter



University of Colorado
Boulder

Department Chair
Sociology Department
327 UCB
Boulder, Colorado 80309-0327

t 303 735 2182
f 303 492 2151
joanne.belknap@colorado.edu

April 16, 2014

Dear Potential Survey Participant:

Faculty and students in the Sociology and Psychology Departments at the University of Colorado-Boulder are interested in studying offenders' self-reported levels of trust, decision-making strategies, and mental health. We designed the attached anonymous survey "The Boulder County Jail Survey: Trust, Decision-Making, and Mental Health."

You are invited to participate in a research project that would involve answering some questions on pencil and paper. This would take about 30-45 minutes.

You are free to choose whether or not you would like to participate. It is completely up to you. If you do decide to participate, you will not receive any payment or any other type of benefit. If you decide not to participate, it will not be held against you.

If you participate, the first thing you will do is sign a consent form, which is our record of your choice to volunteer for our research. This form will be kept separate from the rest of the survey, so your name will not be tied to any of your responses. In other words, your responses will be anonymous (with the exceptions if you report that you may harm yourself or others or you have information regarding solving a crime on the survey).

If you have any questions, please contact a jail staff member, who will refer you to a research assistant. Thank you!

If you are interested in the findings from the study after we have analyzed the data, please feel free to contact Dr. Joanne Belknap at the University of Colorado-Boulder:

Joanne Belknap, Ph.D.
Professor and Chair of Sociology
327 UCB
University of Colorado
Boulder CO 80309-0327
Phone: 303-735-2182
Email: joanne.belknap@colorado.edu

VIII. APPENDIX H: Demographics Table

Table 1: Demographics of Boulder County Jail Inmates			
Characteristic	N	%	(n)
Gender	75		
Men		76.0	(57)
Women		24.0	(18)
Age (X = 34.60)	75		
18-24		26.7	(20)
25-29		14.7	(11)
30-39		28.0	(21)
40+		30.7	(23)
Race/Ethnicity	74		
White		58.1	(43)
Latino/Hispanic		21.6	(16)
African American		4.1	(3)
American Indian/Native American		2.7	(2)
Bi- or Multi-Racial		12.2	(9)
Other		1.4	(1)
Education	75		
Didn't complete/enter HS/receive GED		1.3	(16)
Received GED		20.0	(15)
Graduated high school		14.7	(11)
Some college/no college degree		25.3	(19)
Received college degree		12.0	(9)
Graduate work/degree		6.7	(5)
Employment	72		
Full-time		50.0	(36)
Part-time		6.9	(5)
Occasional		11.1	(8)
Disability/SSI		4.2	(3)
Not employed		27.8	(20)
Year Last Worked	62		
Before 2012		17.7	(11)
2012-2013		50.0	(31)
2014		32.3	(20)
Income Last Yr Worked (X = 24589.89)	45		
Under \$10,000		22.2	(10)
\$10,000-\$14,999		22.2	(10)
\$15,000-\$34,999		28.9	(13)
\$35,000+		26.7	(12)
Relationship Status ^a	73		
Single		41.1	(30)
Married/Cohabiting		28.8	(21)
Divorced		16.4	(12)
Committed Relationship		13.7	(10)
Total Children (X = 1.76)	71		
No children		29.6	(21)
1		23.9	(17)
2		19.7	(14)
3+		26.8	(19)
Total Children under 18 (X = 1.14)	72		
No children		45.8	(33)
1		23.6	(17)
2		13.9	(10)
3+		16.7	(12)

^a One participant reported their relationship status as being widowed.

IX. APPENDIX I: Mental Health Tables

Table 2: Mental Health Diagnoses^a

Mental Health Diagnosis	Pre-Intake Diagnosis		Jail Diagnosis	
	%	(n)	%	(n)
Anxiety Disorder	34.7	(26)	16.0	(12)
Depression	44.0	(33)	24.0	(18)
PTSD	28.0	(21)	9.3	(7)
Schizophrenia	2.7	(2)	0.0	(0)
Bipolar Disorder	28.0	(21)	10.7	(8)

Table 3: Number of Mental Health Diagnoses

Number of Diagnoses	Pre-Intake			Jail		
	%	(n)	X	%	(n)	X
Number of Diagnoses			1.37			.60
0	42.7	(32)		72.0	(54)	
1	18.7	(14)		10.7	(8)	
2	16.0	(12)		8.0	(6)	
3	6.7	(5)		4.0	(3)	
4	13.3	(10)		5.3	(4)	
5	2.7	(2)		0.0	(0)	

Table 4: Mental Health Services^b

Mental Health Service	Pre-Intake MH Services		Post-Intake MH Services	
	%	(n)	%	(n)
Group Therapy	36.0	(27)	22.7	(17)
Individual Therapy	38.7	(29)	16.0	(12)
Medication	38.7	(29)	24.0	(18)
Inpatient Care	16.0	(12)	4.0	(3)

Table 5: Substance Use Items

Substance Use Issue	N	%	(n)
Drinking Problem	75		
Yes		42.7	(32)
No		56.0	(42)
Don't know/not sure		1.3	(1)
Addicted to drugs (other than alcohol)	75		
Yes		41.3	(31)
No		57.3	(43)
Don't know/not sure		1.3	(1)
Substance Use Disorder Diagnosis	74		
Yes		13.5	(10)
No		64.9	(48)
Don't know/not sure		21.6	(16)

^a The categories were not mutually exclusive. Participants could also write other diagnoses that they had received, which are not included in this table, but included Obsessive Compulsive Disorder, Attention Deficit Disorder, and Addiction. For pre-intake, 10.7% (n = 8) of participants selected "other," and for post-intake 4.0% (n = 3) participants selected "other."

^b The categories were not mutually exclusive. Participants could also write other mental health services that they had received, which are not included in this table, but included rehabilitation and peer-support therapy. For pre-intake, 4.0% (n = 3) selected "other," and for post-intake 4.0% (n=3) selected "other."

X. APPENDIX J: Parental Factors Tables

Table 6: Parental Mental Health Diagnoses^a				
Mental Health Diagnosis	Mother's Diagnoses		Father's Diagnoses	
	%	(n)	%	(n)
Anxiety Disorder	24.0	(18)	9.3	(7)
Depression	33.3	(25)	13.3	(10)
PTSD	10.7	(8)	4.0	(3)
Schizophrenia	2.7	(2)	2.7	(2)
Bipolar	9.3	(7)	4.0	(3)
Don't know/not sure	25.3	(19)	33.3	(25)

Table 7: Parental Incarceration						
Parental Incarceration	Mother Incarcerated			Father Incarcerated		
	N	%	(n)	N	%	(n)
Incarcerated	75			75		
Yes		17.3	(13)		40.0	(30)
No		73.3	(55)		45.3	(34)
Don't know/not sure		9.3	(7)		14.7	(11)

^a The categories were not mutually exclusive. Participants could also write other diagnoses that they believed their mother or father to have had. For maternal mental health diagnoses 2.7% (n = 2) selected "other," and for paternal mental health diagnoses 1.3% (n = 1) selected "other."

XI. APPENDIX K: Brief Symptom Inventory-18 Table

Table 8: Brief Symptom Inventory-18 (By Question)

Symptom	Not at all % (n)	A little bit % (n)	Moderately % (n)	Quite a bit % (n)	Extremely ^a % (n)	X
Somatization Items (X)						0.70
Faintness	76.0 (57)	13.3 (10)	5.3 (4)	2.7 (2)	2.7 (2)	0.43
Pains in chest	74.7 (56)	9.3 (7)	13.3 (10)	1.3 (1)	1.3 (1)	0.45
Nausea	62.7 (47)	10.7 (8)	9.3 (7)	10.7 (8)	6.7 (5)	0.88
Trouble breathing	74.3 (55)	8.1 (6)	6.8 (5)	6.8 (5)	4.1 (3)	0.58
Numbness in body	53.3 (40)	16.0 (12)	13.3 (10)	6.7 (5)	10.7 (8)	1.05
Feeling weak	60.8 (45)	16.2 (12)	9.5 (7)	6.8 (5)	6.8 (5)	0.82
Depression Items (X)						1.20
Feeling no interest	38.7 (29)	28.0 (21)	17.3 (13)	9.3 (7)	6.7 (5)	1.17
Feeling lonely	30.7 (23)	18.7 (14)	21.3 (16)	14.7 (11)	14.7 (11)	1.64
Feeling blue	26.7 (20)	18.7 (14)	22.7 (17)	14.7 (11)	17.3 (13)	1.77
Feeling worthless	50.7 (38)	21.3 (16)	16.0 (12)	1.3 (1)	10.7 (8)	1.00
Feeling hopeless	41.3 (31)	24.0 (18)	13.3 (10)	14.7 (11)	6.7 (5)	1.21
Ending life	82.7 (62)	8.0 (6)	1.3 (1)	2.7 (2)	5.3 (4)	0.40
Anxiety Items (X)						1.02
Nervousness	50.7 (38)	17.3 (13)	18.7 (14)	6.7 (5)	6.7 (5)	1.01
Feelings tense	30.7 (23)	18.7 (14)	20.0 (15)	17.3 (13)	13.3 (10)	1.64
Suddenly scared	68.0 (51)	14.7 (11)	10.7 (8)	1.3 (1)	5.3 (4)	0.61
Spells of terror	69.3 (52)	9.3 (7)	5.3 (4)	8.0 (6)	8.0 (6)	0.76
Feeling restless	50.0 (36)	16.7 (12)	8.3 (6)	15.3 (11)	9.7 (7)	1.18
Feeling fearful	56.0 (42)	17.3 (13)	13.3 (10)	5.3 (4)	8.0 (6)	0.92
Total BSI Score (X)						0.97

^a The Brief Symptom Inventory-18 is ranked 0 = Not at all, 1 = A little bit, 2 = Moderately, 3 = Quite a bit, and 4 = Extremely.

XII. APPENDIX L: Offending History Table

Table 9: Offending History			
Offense Characteristic	N	%	(n)
Current Offense	67		
Prostitution		0.0	(0)
Probation/parole violation		59.7	(40)
Property		16.4	(11)
Person (violent)		23.9	(16)
Drug/alcohol		44.8	(30)
Juvenile Arrests	74		
No		54.1	(40)
Yes		45.9	(34)
Number of times in jail	73		
None		5.5	(4)
1-3		32.9	(24)
4-9		35.6	(26)
10+		26.0	(19)
Number of times in prison	73		
None		79.5	(58)
1		12.3	(9)
2		8.2	(6)

XIII. APPENDIX M: Victimization History Table

Table 10: Victimization History			
Victimization	N	%	(n)
Childhood Victimization (under 18)			
Sexual Abuse	72		
None		68.1	(49)
1-5		19.4	(14)
6+		12.5	(9)
Physical Abuse	72		
None		55.6	(40)
1-5		8.3	(6)
6+		36.1	(26)
Neglect by Parent/Guardian	70		
None		62.9	(44)
1-5		8.6	(6)
6+		28.6	(20)
Robbery	71		
None		83.1	(59)
1-5		12.7	(9)
6+		4.2	(3)
Witness Domestic Violence	71		
None		62.0	(44)
1-5		11.3	(8)
6+		26.8	(19)
Witnessing Other Victimization	71		
None		50.7	(36)
1-5		26.8	(19)
6+		22.5	(16)
Adult Victimization (18 and older)			
Sexual Abuse	71		
None		87.3	(62)
1-5		12.7	(9)
6+		0.0	(0)
Physical Abuse	71		
None		46.5	(33)
1-5		32.4	(23)
6+		21.1	(15)
Domestic Violence	71		
None		57.7	(41)
1-5		29.6	(21)
6+		12.7	(9)
Robbery	71		
None		60.6	(43)
1-5		33.8	(24)
6+		5.6	(4)
Witness Other Victimization	71		
None		49.3	(35)
1-5		26.8	(19)
6+		23.9	(17)

XIV. APPENDIX N: Brief Symptom Inventory Categories and Mental Health Diagnoses

Table 11: Correlations between BSI Categories and Mental Health Diagnoses				
Type of BSI Item	BSI SOM	BSI DEP	BSI ANX	BSI Total
Pre-Jail Diagnosis				
Anxiety Disorder	0.52**	0.44**	0.50**	0.54**
Depression	0.32**	0.32**	0.27*	0.33**
PTSD	0.36**	0.28*	0.33**	0.37**
Schizophrenia	0.08	0.16	-0.03	0.08
Bipolar Disorder	0.41**	0.40**	0.48**	0.46**
Jail Diagnosis				
Anxiety Disorder	0.46**	0.35**	0.49**	0.46**
Depression	0.38**	0.38**	0.41**	0.42**
PTSD	0.32**	0.26*	0.39**	0.35**
Schizophrenia	-	-	-	-
Bipolar Disorder	0.25*	0.22	0.34**	0.30*
Summed Diagnosis				
Anxiety Disorder	0.51**	0.43**	0.50**	0.53**
Depression	0.36**	0.38**	0.33**	0.39**
PTSD	0.33**	0.25*	0.31**	0.34**
Schizophrenia	0.08	0.16	-0.03	0.09
Bipolar Disorder	0.41**	0.40**	0.48**	0.46**

* $p \leq .05$

** $p \leq .01$

XV. Appendix O: BSI Categories and Inmate Characteristics

Table 12: Correlations between BSI Categories and Inmate Characteristics

Type of BSI Item	BSI SOM	BSI DEP	BSI ANX	BSI Total
Pre-Intake Mental Health Services				
Group Therapy	0.37	0.16	0.03	0.02
Individual Therapy	0.14	0.26*	0.21	0.17
Medication	0.20	0.27*	0.25*	0.22
Inpatient care	0.09	0.27*	0.24*	0.22
Jail Mental Health Services				
Group Therapy	0.21	0.17	0.23*	0.22
Individual Therapy	0.14	0.21	0.13	0.17
Medication	0.30*	0.42*	0.34**	0.36**
Inpatient care	0.28*	0.40**	0.44**	0.43**
Mother's Diagnosis				
Anxiety Disorder	0.31**	0.39**	0.35**	0.40**
Depression	0.28*	0.36**	0.20	0.30**
PTSD	0.15	0.27*	0.29*	0.26*
Schizophrenia	0.24*	0.08	0.22	0.21
Bipolar Disorder	0.12	0.16	0.16	0.15
Father's Diagnosis				
Anxiety Disorder	0.34**	0.46**	0.31**	0.38**
Depression	0.30**	0.50**	0.38**	0.37**
PTSD	0.13	0.38**	0.29*	0.30*
Schizophrenia	-0.14	-0.09	-0.10	-0.12
Bipolar Disorder	0.45**	0.28*	0.41**	0.44**
Parental Incarceration				
Mother Incarcerated	0.05	0.02	0.04	0.06
Father Incarcerated	0.21	0.09	0.06	0.15
Substance Use				
Alcohol Problem	0.18	0.38**	0.27*	0.30*
Drug Addiction	0.38**	0.35**	0.37**	0.41**
Substance Use Disorder	0.25*	0.32**	0.26*	0.28*
Current Offense				
Probation/parole violation	-0.10	-0.04	-0.11	-0.11
Property	0.31*	0.34**	0.37**	0.43**
Person (violent)	-0.02	-0.03	-0.06	-0.02
Drug/Alcohol	-0.02	0.23	0.10	0.05
Number of Incarcerations				
Jail	0.44**	0.31**	0.42**	0.44**
Prison	0.17	0.10	0.13	0.13
Childhood Victimization				
Sexual Abuse	0.28*	0.33**	0.38**	0.34**
Physical Abuse	0.36**	0.39*	0.39**	0.33**
Neglect	0.21	0.12	0.24	0.12
Robbery	-0.11	0.28*	0.21	0.02
Witness Domestic Violence	0.11	0.24*	0.33**	0.22
Witness Other Victimization	0.19	0.16	0.28*	0.25*
Adult Victimization				
Sexual Abuse	0.20	0.30*	0.13	0.19
Physical Abuse	0.31**	0.28*	0.37**	0.36**
Robbery	0.60	0.20	0.15	0.07
Domestic Violence	0.22	0.12	0.15	0.14
Witness Other Victimization	0.25*	0.25*	0.24	0.25*

* $p \leq .05$

** $p \leq .01$

XVI. APPENDIX P: Mental Health Diagnoses and Inmate Characteristics

Table 13: Correlations between Inmates' MH Diagnoses and Inmate Characteristics

Inmate Diagnosis	Anxiety	Depression	PTSD	Schizophrenia	Bipolar
Pre-Intake Mental Health Services					
Group Therapy	0.19	0.41**	0.25*	0.22	0.28*
Individual Therapy	0.32**	0.57**	0.27*	0.04	0.30**
Medication	0.49**	0.57**	0.39**	0.04	0.42**
Inpatient care	0.20	0.39**	0.20	0.15	0.46**
Jail Mental Health Services					
Group Therapy	0.19	0.26*	0.14	-0.09	0.09
Individual Therapy	0.05	0.39**	0.12	-0.07	0.13
Medication	0.36**	0.41**	0.12	0.10	0.35**
Inpatient care	0.27*	0.22	0.17	-0.03	0.18
Mother's Diagnosis					
Anxiety Disorder	0.29*	0.23	0.12	0.10	0.28*
Depression	0.24*	0.25*	0.04	0.06	0.13
PTSD	0.19	0.28*	0.06	-0.06	0.27*
Schizophrenia	0.22	0.18	0.26*	-0.03	0.08
Bipolar Disorder	0.05	0.16	-0.01	-0.05	0.31**
Father's Diagnosis					
Anxiety Disorder	0.24*	0.16	-0.01	0.23*	0.11
Depression	0.36**	0.34**	0.09	0.18	0.11
PTSD	0.13	0.08	0.02	-0.03	0.02
Schizophrenia	0.05	0.01	0.08	-0.03	0.08
Bipolar Disorder	0.27*	0.22	0.02	-0.03	0.36**
Parental Incarceration					
Mother Incarcerated	-0.03	0.06	0.09	-0.09	0.07
Father Incarcerated	0.01	-0.05	0.11	-0.16	0.02
Substance Use					
Alcohol Problem	0.20	0.26*	0.06	0.02	0.14
Drug Addiction	0.33**	0.24*	0.19	0.02	0.38**
SUD Diagnosis	0.09	0.14	0.08	-0.01	0.14
Offense Type					
Probation/Parole	-0.07	-0.08	-0.04	0.14	-0.02
Property	0.21	0.20	0.22	0.16	0.26*
Person (violent)	-0.10	0.13	0.07	-0.10	-0.04
Drug/Alcohol	0.18	-0.01	-0.16	0.20	0.03
Number of Incarcerations					
Jail	0.29*	0.26*	0.23	0.07	0.23
Prison	0.12	-0.02	-0.05	-0.08	-0.14
Childhood Victimization					
Sexual Abuse	0.34**	0.38**	0.27*	-0.09	0.21
Physical Abuse	0.28*	0.20	0.37**	-0.14	0.35**
Neglect	0.25*	0.26*	0.29*	-0.12	0.34**
Robbery	0.13	0.05	0.12	-0.07	0.16
Witness DV	0.16	0.09	0.25*	-0.12	0.17
Witness Other	0.18	0.09	0.19	-0.15	0.03
Adult Victimization					
Sexual Abuse	0.26*	0.17	0.15	0.40**	0.04
Physical Abuse	0.18	0.24*	0.16	0.05	0.16
Robbery	0.18	0.21	0.15	0.21	0.25*
Domestic Violence	0.21	0.25*	0.28*	-0.12	0.23
Witness Other	0.25*	0.26*	0.12	0.06	0.10

* $p \leq .05$

** $p \leq .01$

XVII. APPENDIX Q: Victimization History and Current Offense

Table 14: Correlations between Offending and Victimization

Offense Type	Prob/Parole	Property	Person	Drug/Alcohol
Child Victimization				
Sexual Abuse	-0.08	0.10	0.15	0.12
Physical Abuse	0.10	0.07	0.12	0.07
Neglect	-0.09	0.04	0.02	0.12
Robbery	0.01	0.04	0.20	0.24
Witness DV	0.14	0.13	0.06	0.08
Witness Other	0.19	0.15	0.01	0.03
Adult Victimization				
Sexual Abuse	0.18	0.16	-0.10	0.24
Physical Abuse	0.16	0.21	0.02	0.12
Robbery	0.13	0.06	0.12	-0.12
Domestic Violence	0.08	0.32*	-0.08	0.23
Witness Other	0.14	0.35**	0.10	0.10

* $p \leq .05$

** $p \leq .01$

